

**IT IS THE VENDOR'S RESPONSIBILITY TO
CHECK FOR ADDENDA PRIOR TO SUBMITTING PROPOSALS**

**NOTICE TO BIDDERS
SPECIFICATION NO. 04-129**

The City of Lincoln, Nebraska intends to purchase and invites you to submit a sealed bid for:

**Lincoln Water System Platte River Wellfield
Hydrogeologic Investigation**

Sealed bids will be received by the City of Lincoln, Nebraska on or before **12:00 noon Wednesday, May 19, 2004** in the office of the Purchasing Agent, Suite 200, K Street Complex, Southwest Wing, 440 South 8th Street, Lincoln, Nebraska 68508. Bids will be publicly opened and read at the K Street Complex.

Bidders should take caution if U.S. mail or mail delivery services are used for the submission of bids. Mailing should be made in sufficient time for bids to arrive in the Purchasing Division, prior to the time and date specified above.

A copy of the Invitation to Bid may be obtained from the Purchasing Division (402)441-7417 or Web Site at: <http://www.ci.lincoln.ne.us>

All communications relative to this work prior to opening of the bids shall be directed in writing to Nick McElvain, Lincoln Water System, 2021 N 27th St, Lincoln, NE 68503, email nmcelvain@ci.lincoln.ne.us and cc Mary Matson, City of Lincoln Purchasing, 440 S. 8th St, Lincoln, NE 68508, email mmatson@ci.lincoln.ne.us

**Lincoln Water System
Platte River Wellfield
Hydrogeologic Investigation
Technical Specifications
Spec. No. 04-129**

SECTION A

1. Purpose/Intent

- 1.1 These technical specifications outline the details of the hydrogeologic investigation to find locations for new horizontal collector wells on the island and along the east bank of the Platte River on the Lincoln Water System (LWS) wellfield property.
 - 1.1.1 The goal of the hydrogeologic investigation is to find two (2) new locations on the island and two (2) locations on the east bank for collector wells.
 - 1.1.2 Several favorable locations have been identified through test borings drilled in the 1970s and 1980s and through computer modeling.
 - 1.1.3 More detailed aquifer testing is required to confirm the potential for new collector wells.

2. Scope of Work

- 2.2 All drilling shall conform to all applicable requirements of the Nebraska Department of Health, Title 178 - Department of Health and Human Services Regulation and Licensure, Chapter 12 - Regulations Governing Water Well Construction, Pump Installation and Water Well Decommissioning Standards, as well as any other applicable Nebraska requirements.
- 2.3 All field activities are to be directed by a Hydrogeologist experienced in evaluation and design of vertical wells and horizontal collector wells.
 - 2.3.1 Drilling shall be performed by a drilling company experienced in the method(s) proposed.
- 2.4 The Contractor shall furnish all necessary labor, equipment, and materials required to complete the hydrogeologic investigation.
- 2.5 The hydrogeologic investigation will consist of the following major tasks:
 - 2.5.1 Twelve (12) simple test borings along the island and east bank solely to determine depth to bedrock;
 - 2.5.2 Twelve (12) test borings along with hydraulic interval testing to determine the most favorable locations for detailed aquifer testing;
 - 2.5.3 Four (4) detailed aquifer tests to determine the most favorable locations for horizontal collector wells; each detailed aquifer test will consist of up to four (4) additional test borings and one (1) 12-inch test production well.
 - 2.5.4 Of all test borings (excluding the 12 simple borings to determine depth to bedrock), six (6) will be converted to permanent 4-inch monitoring wells for long-term monitoring at the wellfield.
 - 2.5.4.1 The remainder will be converted to temporary 2-inch monitoring wells, if deemed appropriate based on the results of the test borings.
 - 2.5.5 Data Reporting.
- 2.6 For purposes of these technical specifications, the following terms apply

- 2.6.1 Hydrogeologist (or Contractor) - Company to oversee and collect data from all drilling and testing activities and provide a summary report.
- 2.6.2 Driller - Company or companies subcontracted by the Hydrogeologist that will be responsible for drilling the borings and installing the wells.
- 2.6.3 Owner - Lincoln Water System (LWS). Contact: Rick Roberts 402-323-3865
- 2.6.4 Groundwater Modeling Consultant - TZA Water Engineers (TZA). Contact: Bruce Kroeker 303-971-0030
- 2.6.5 Engineer - Black & Veatch (B&V). Contact: Kris Hahn 913-458-3213
- 2.7 All communications relative to this work prior to opening of the bids shall be directed in writing to Nick McElvain, Lincoln Water System, 2021 N 27th St, Lincoln, NE 68503, email nmcelvain@ci.lincoln.ne.us and cc Mary Matson, City of Lincoln Purchasing, 440 S. 8th St, Lincoln, NE 68508, email mmatson@ci.lincoln.ne.us

3. General

- 3.1 Qualifications
 - 3.1.2 The Contractor shall provide evidence of qualifications to conduct the scope of work including resumes of key personnel, references, examples of similar projects, and licensure for Nebraska.
 - 3.1.3 Evidence should be provided of experience with the drilling methods proposed in achieving desired results drilling in similar formations.
 - 3.1.4 Expertise should be demonstrated in the design of horizontal collector wells.
- 3.2 Procedure
 - 3.2.1 The work will be directed by a qualified Hydrogeologist who shall make necessary decisions as to well completion depth, screen placement and slot size selection, well development, hydraulic interval testing, and detailed aquifer testing.
 - 3.2.2 The Contractor shall consult with the Engineer and Owner for review of proposed methods and procedures as the work progresses.
- 3.3 Codes, Ordinances and Permits
 - 3.3.1 The Contractor shall comply with all laws, ordinances and codes, rules and regulations of the Local and State Authorities having jurisdiction over any of the work specified herein, and apply for all necessary permits.
 - 3.3.2 The Contractor will submit copies of all permits to the Owner.
- 3.4 Right of Way
 - 3.4.1 The Owner will provide for the right of entry of the Contractor and right of entry of all necessary equipment in order to complete the Work.
 - 3.4.2 The Contractor will provide the temporary access road(s) to the testing locations prior to mobilizing the drilling equipment.
 - 3.4.3 The Contractor will take all reasonable precautions to minimize any damage to the property.
 - 3.4.4 No trees greater than 12 inches in diameter shall be cut down or removed. The road(s) can weave as much as is practical.
 - 3.4.5 At the Contractor's discretion, it may be necessary to place locally a granular material to facilitate passage following rainfall events.
 - 3.4.6 The Contractor shall confine equipment mobilization to the routes identified by the Owner.
 - 3.4.7 The Contractor shall confine all equipment, storage of materials and equipment, and the operations of his employees to areas permitted by law, ordinances, permits, or the requirements of the contract documents, and shall not unreasonably encumber the premises with materials or equipment.
 - 3.4.8 The Contractor shall confirm all underground and overhead utilities or structures with the

- Owner prior to doing any work on site.
- 3.4.9 The Contractor shall indemnify and hold harmless the Owner or his representatives from and against any and all loss, cost and damage, including unreasonable attorney's fees, arising out of failure to research overhead and underground facilities.

3.5 Drilling Conditions

- 3.5.1 The Contractor is advised that groundwater levels vary considerably at the wellfield in relationship to changes of the water level in the Platte River.
- 3.5.2 Several exploratory borings have been made on the island and east bank, which should be reviewed by the Contractor.
- 3.5.3 The Owner does not guarantee the accuracy of the boring information.
- 3.5.4 The depth to bedrock on the island and east bank is expected to be up to approximately 80 to 90 feet below ground surface, but will be shallower toward the center of the island because of a known bedrock ridge.
- 3.5.5 The hydrogeologic investigation will proceed in stages to (1) identify bedrock, (2) identify local aquifer characteristics through hydraulic interval testing, and (3) identify favorable locations for collector wells through detailed aquifer testing.
- 3.5.6 The exact drilling locations for each stage will be determined from the results obtained during the previous stage.
- 3.5.7 These specifications list the number of borings, monitoring wells, and test production wells that are planned, but the exact locations will need to be determined in the field.

4. Monitoring and Test Production Wells

4.1 Standards

- 4.1.1 The following standards are applicable for the monitoring wells and test production wells to be used in the hydrogeologic investigation
- 4.1.1.1 ASTM Material Standards
- 4.1.1.2 AWWA Standard Specifications

4.2 Horizontal and Vertical Control

- 4.2.1 Elevations shown on the drawings will be based on U.S. Geological Survey datum (NGVD 1929).
- 4.2.2 Horizontal control will be based on UTM NAD 1927, Zone 14.
- 4.2.3 The Hydrogeologist will be responsible for a field survey to determine the coordinates and elevations at each bedrock test boring, monitoring well, and test production well location.
- 4.2.4 The field survey will accurately determine the horizontal locations of all borings and wells with an accuracy equal to or better than ± 0.50 foot.
- 4.2.5 Vertical elevations will be determined for the ground surface at the well or boring and the top of casing for the wells or other reference mark from which all water surfaces are measured during the testing to within ± 0.01 foot.
- 4.2.6 The field survey should also locate the coordinates and elevations of the river gauges or stilling wells used during the investigation to measure changes in river levels.
- 4.2.7 For permanent monitoring wells, the survey will include the installation of a permanent brass benchmark cap in the concrete base around the well (see Figure 1).
- 4.2.8 The Hydrogeologist will also collect coordinate information of each boring and well using a handheld GPS unit in UTM NAD 1927.
- 4.2.8.1 The GPS coordinates should be accurate to within 15 meters or better.

4.3 Delivery, Storage and Handling

- 4.3.1 All casing pipe shall be new and supplied in standard lengths.
- 4.3.2 To prevent ultraviolet degradation of the PVC and to reduce contamination, all pipe and

- screen shall be stored indoors by the manufacturer.
 - 4.3.3 Screen and casing shall be wrapped after cleaning and prior to shipment.
 - 4.3.4 The finished pipe and screen must be received in visibly clean condition, free of oil, grease, dirt, and markings other than those specified.
- 4.4 Casings and Screens for Test Production Wells
 - 4.4.1 The casing for each test production well for the detailed aquifer tests shall be steel not less than 12 inches in diameter, extending from an elevation below ground to an elevation above ground as determined by the Hydrogeologist using the information collected while drilling the boring.
 - 4.4.2 Casings shall be fabricated from steel conforming to ASTM A283, Grade B or C, with maximum carbon content of 0.30 percent and maximum manganese content of one percent, or to ASTM A139, Grade B.
 - 4.4.2.1 Fabrication shall conform to AWWA C201 or C202.
 - 4.4.2.2 Joints shall be welded and watertight.
 - 4.4.3 The finished pipe and screen must be received in visibly clean condition, free of oil, grease, dirt, and markings other than those specified.
 - 4.4.4 Test production well screens shall be Cook Heavy I.D. type Wire Wound Strainer as manufactured by the Cook Well Strainer Company; Johnson I.D. Size Well Screen, or as manufactured by Johnson Division of HOP Incorporated. Screens shall be fabricated from AISI Type 304 stainless steel.
 - 4.4.4.1 The vertical length of screen shall be determined by the Hydrogeologist based on the boring information, but will not be less than twenty (20) feet in length.
 - 4.4.4.2 Screen slot size is anticipated to be between 60 and 100 slot if gravel pack is not used, and will be determined by the Hydrogeologist if gravel pack is used.
 - 4.4.4.3 The aperture width of the screen should retain a minimum of 85 percent of the gravel pack, if used, or a minimum of 50 percent of the aquifer material if gravel pack is not used, based on Nebraska Title 178 requirements.
 - 4.4.4.4 The Hydrogeologist will be responsible for selecting the proper screen slot size based on boring information to develop the well to its maximum efficiency.
 - 4.4.4.5 For purposes of this bid, the Contractor should assume a 100 slot screen opening for the test production wells, but will have screens with appropriate slot sizes available for use on-site during the hydrogeologic investigation.
 - 4.4.5 Each screen or members and elements thereof shall be of adequate strength and thickness to meet the required service conditions.
 - 4.4.5.1 All members and elements between slots shall be of adequate section and strength to safely withstand all loads and stresses to which they may be subjected.
 - 4.4.5.2 The screens shall have sufficient strength to safely support vertically the load imposed thereon by the casing or a suitable method acceptable to the Engineer shall be devised to support the casing independent of the screen.
 - 4.4.5.3 Screen sections shall be fabricated by welding all joints and points of contact of assembled parts.
 - 4.4.5.4 Unless otherwise authorized by the Engineer, all joints between screen sections shall be securely welded.
 - 4.4.5.5 Details of such joints shall be acceptable to the Engineer.
 - 4.4.6 The end of the screen section in each well shall be tightly sealed by means of a stainless steel plate not less than 3/8 inch in nominal thickness, attached to the screen by means of a continuous weld around its entire circumference.
 - 4.4.6.1 This plate shall serve the dual purpose of closing the bottom of the well and supporting the casing and screen assembly.
- 4.5 Casings and Screens for Monitoring Wells

- 4.5.1 All monitoring well casing pipe and screen shall be PVC Schedule 40, flush-threaded and manufactured from Type 1, Grade 1, PVC resins as specified in ASTM D1784, not less than 2 or 4 inches in diameter, depending on whether the monitoring well will be temporary or permanent, respectively.
 - 4.5.2.1 All flush-treaded PVC well casing pipe and screen shall meet or exceed the physical requirements of ASTM F480-02 for thermoplastic water well casing
 - 4.5.2.2 Joints shall be leakproof without the use of sealant.
 - 4.5.2.3 The screen shall be a minimum of ten (10) feet in length.
 - 4.5.2.4 Screen slot size is anticipated to be 20 slot, but the Hydrogeologist may determine that a different slot size is necessary and will be responsible for selecting the proper size based on boring information to develop the well to its maximum efficiency.
 - 4.5.2.5 The slot size will be dependent on whether or not a gravel pack is used around the screen.
 - 4.5.2.6 For purposes of this bid, the Contractor should assume a 20 slot screen opening, but will have screens with appropriate slot sizes available for use on-site during the hydrogeologic investigation.
- 4.6.1 Six (6) of the test borings completed for this investigation will be converted to permanent 4-inch monitoring wells.
 - 4.6.1.1 The Hydrogeologist will work closely with the Owner and Engineer to determine which of the test borings will be converted to permanent monitoring wells.
 - 4.6.1.2 The remaining test borings will be converted to temporary 2-inch monitoring wells, if deemed appropriate by the Hydrogeologist based on the results of the testing.
 - 4.6.1.3 Since it will not be known prior to drilling whether a boring will be converted to a 2-inch or 4-inch monitoring well, all test borings (except for the Phase 1 bedrock borings described later) will be 8 inches in diameter to meet Nebraska requirements that the bore hole will be at least 4 inches larger in diameter than the casing to be installed.
 - 4.6.1.4 Some of these temporary monitoring wells may be removed, and some may be left in place at the end of this hydrogeologic investigation prior to demobilization.
 - 4.6.1.5 The Hydrogeologist will work with the Owner and Engineer to determine which temporary 2-inch monitoring wells will be removed.
- 4.6.2 The PVC well pipe and screen shall be threaded with a single or double start, acme thread.
 - 4.6.2.1 The threads shall be beveled to reduce stress and reduce friction during the field assembly.
 - 4.6.2.2 An O-ring groove shall be turned into the male threaded end and supplied with a viton-O-ring.
 - 4.6.2.3 Threaded connections shall be manufactured using computer-controlled lathes.
- 4.6.3 The finished pipe and screen must be received in visibly clean condition, free of oil, grease, dirt, and markings other than those specified.
- 4.6.4 Figure 1 shows a typical 4-inch monitoring well for this hydrogeologic investigation.
- 4.7 Gravel Pack
 - 4.7.1 Based on the conditions encountered during drilling, the Hydrogeologist may determine that a gravel pack is necessary around a monitoring or production well.
 - 4.7.2.1 Gravel packing of the permanent monitoring wells is desired.
 - 4.7.3.2 All material used for construction for the gravel pack around the well casing and screen shall be cleaned, well rounded particles of 95 percent siliceous material which has been thoroughly cleaned of all silt, dust, and other foreign matter.
 - 4.7.4.3 All gravel used shall be screened and processed to provide a material of size and gradation required to guarantee that the completed well will be sand free.
 - 4.7.2 The gravel pack shall exclude the entrance of fine silts, sands, and clay into the well.
 - 4.7.2.1 The grain size distribution curve for the gravel shall be selected by multiplying the

- 70 percent retained size of the finest formation samples by 4.
 - 4.7.3.2 Uniformity coefficient for the gravel pack shall be between 1 and 2.5.
 - 4.7.3.3 The Hydrogeologist will be responsible for selecting the appropriate gravel pack for each well.
 - 4.7.3.4 Gravel for each permanent monitoring well shall be disinfected prior to placement as described in AWWA Standard C 654-03.
 - 4.7.3.4.1 The Contractor will document all disinfection procedures in his daily field log.
- 4.8 Well Cement Grout and Bentonite Seal
- 4.8.1 Cement grout will be placed in the annular spaces in accordance with State requirements.
 - 4.8.1.1 A minimum vertical thickness of 2 feet of grout approximately 10 feet below ground or static water level (whichever is less) must be placed around all temporary monitoring wells and temporary test production wells, and the annular space from the grout to the surface shall be filled with grout or a mixture of drilling fluid and gravel, topsoil, or clay, based on Nebraska Title 178 requirements.
 - 4.8.1.2 The materials used for the well grout shall be as follows,
 - 4.8.1.2.1 Portland Cement ASTM C150, Type I.
 - 4.8.1.2.2 Sand ASTM C33, fine aggregate, clean, well graded, natural sand.
 - 4.8.1.2.3 Water, clean and free from deleterious substances.
 - 4.8.1.2.4 Bentonite Pellets, preformed pellets of highly compressed bentonite clay, having a nominal diameter of ½ inch.
 - 4.8.2 The grout shall be a mixture of Portland Cement (ASTM C150, Type I), sand, and water in the proportion of not more than two parts by weight of sand to one part of cement.
 - 4.8.2.1 Not more than seven (7) gallons of clean water shall be used per bag of cement (one cubic foot or 94 pounds).
 - 4.8.3 For the permanent monitoring wells, a bentonite seal will be placed on top of the gravel pack, or if a gravel pack is not used, the bentonite seal shall be placed five (5) feet above the top of the screen and will have a thickness of 2 feet as shown on Figure 1.
 - 4.8.3.1 Above the bentonite seal, the cement grout shall extend to the ground surface, as shown on the figure.
 - 4.8.3.2 The bentonite seal will be composed of a slurry of a minimum of 20 percent by weight bentonite pellets.
- 4.9 Drilling and Construction Procedure
- 4.9.1 The drilling and construction procedures for each of the types of test borings and wells are outlined in the following sections.
 - 4.9.1.1 The Driller must be thoroughly experienced with the method described.
 - 4.9.1.2 Drilling equipment, temporary casing, well casing, and screen shall be clean prior to use.
 - 4.9.2 All borings and wells will be completed to bedrock.
 - 4.9.2.1 The borehole diameter must be at least 4 inches larger than the diameter of the casing to be used to meet Nebraska requirements.
 - 4.9.2.2 Since it will not be known prior to drilling whether a boring will be converted to a 2-inch or 4-inch monitoring well, all test borings (except for the Phase 1 bedrock borings described later) will be 8 inches in diameter.
 - 4.9.2.3 Upon completion of a boring that is to be converted to a monitoring or test production well, the hole should be cleaned to the depth specified by the Hydrogeologist.
 - 4.9.3 The Contractor shall be prepared to use temporary casing or other approved means to keep the hole open during construction.

- 4.9.3.1 Temporary casing used during the drilling shall be removed and recovered by the Driller.
- 4.9.3.2 Temporary casing shall be recovered without causing caving of the drilled hole.
- 4.9.3.3 The wells shall be constructed round and true to line.
- 4.9.3.4 No well will be accepted if the straightness or vertical alignment is unsatisfactory to the extent that it interferes with the testing results.
- 4.9.4 After the drilling is completed, the casing and screen shall be installed in the well.
 - 4.9.4.1 Care shall be taken that the closed end of the casing has a uniform bearing on the bottom of the hole, that the bottom of the casing is centered in the borehole or construction casing, and that the screen is set plumb regardless of any out-of-plumb condition of the bore hole.
- 4.9.5 The casing, including the screen sections, shall extend from the bottom of the well to the elevation determined by the Hydrogeologist and in accordance with Nebraska requirements.
 - 4.9.5.1 Each permanent 4-inch PVC monitoring well casing shall project 2 feet above grade through a steel pipe guard set in a concrete pad and shall be provided with a lockable, removable cap.
 - 4.9.5.2 Construction of the permanent monitoring wells shall conform to the requirements shown in Figure 1.
- 4.9.6 Placement of any gravel pack in the annular space between the casing and the side of the hole shall be so controlled that at no time will the gravel be allowed to free-fall more than 5 feet above the top of the gravel or grout already deposited in the well.
 - 4.9.6.1 All operations of handling and placing the gravel shall be regulated to prevent segregation of sizes of the gravel particles.
- 4.9.7 Grout shall be placed with a grout pipe which must extend to the bottom of the interval to be filled and remain submerged in grout the entire time grout is being placed.
 - 4.9.7.1 The grout pipe shall be gradually removed.
 - 4.9.7.2 In the event of interruption in the grouting operations, the bottom of the pipe shall be raised above the grout level and shall not be resubmerged until all air and water have been displaced from the grout pipe.
- 4.9.8 Upon completion of a boring that is to be converted to a permanent monitoring well, the hole should be cleaned to the depth specified by the Hydrogeologist.
 - 4.9.8.1 The PVC screen and riser pipe will be installed in the hole and the temporary steel casing will be pulled back to at least two feet above the top of the screen to expose the screen to the formation.
 - 4.9.8.2 The Hydrogeologist will determine if a gravel pack is necessary. The remaining annulus around the casing will be properly grouted to ensure surface water does not enter the well from outside the casing.
- 4.9.9 The Hydrogeologist will consult with the Engineer prior to drilling each boring and agree upon the most appropriate location.
- 4.9.10 The Contractor will keep, in the field, an accurate log of all test borings and wells drilled.
 - 4.9.10.1 For the twelve (12) bedrock test borings, the Contractor should log the depth from the ground surface to bedrock, and should make general notes of the type of material encounter, but does not have to log the hole in detail.
 - 4.9.10.2 For all other borings drilled, the Contractor will keep a detailed well log including the length of casing placed in hole, relative ease of drilling, depth and thickness of each soil stratum encountered, depth to bedrock, depth to bottom of hole, and static water level.
 - 4.9.10.3 The Contractor shall keep and maintain a daily report of the number of feet drilled, number of hours on the job, any shutdown, water level at the beginning and end of each day, and other pertinent data.
 - 4.9.10.4 Complete logs and reports shall be furnished to the Owner at the completion of the project.

- 4.9.11 Soil samples will be obtained every five feet and at changes in the formation. 4.9.11.1 Samples will be collected from ground surface to the completed depth.
 - 4.9.11.2 Formation samples shall be placed in suitable containers by the Contractor.
 - 4.9.11.3 Samples will be identified as to the date of collection, hole number, and depth of stratum.
- 4.10 Development
 - 4.10.1 Each monitoring and test production well shall be fully developed by extracting all of the sand and finer particles possible by approved methods of agitation to assure minimal screen and well losses and eliminate pumping of formation materials.
 - 4.10.2.1 It is expected and required that the Driller perform his work in accordance with accepted development practices, under the guidance of the Hydrogeologist.
 - 4.10.3.2 It is not intended that these specifications should give a full description of all development procedures that may be required.
 - 4.10.3.3 Each well shall be fully developed to obtain the maximum yield of water per foot of drawdown.
 - 4.10.2 For the permanent monitoring wells, the final phase of development shall be done by use of the test pump hereinafter described.
 - 4.10.2.1 During this phase of development, the test pump should be stopped and started frequently to provide a surging action to the operation.
 - 4.10.2.2 As specified elsewhere in these specifications, the test pump must be capable of pumping at least 200 gpm.
 - 4.10.3 Each permanent monitoring well shall be bailed, washed, backwashed, surged, and developed until the water produced has no visible turbidity (i.e., less than 10 NTU).
 - 4.10.3.1 If the water pumped from the well does not meet the turbidity requirement, the Owner may require that the Contractor remove the pump and redevelop the well by use of surge block and bailer, and then reinstall the pump and repeat the pumping phase of the development.
- 4.11 Testing
 - 4.11.1 After installation of the pipe casing, well screen, gravel pack, and surging to achieve full development by extracting all of the sand and finer particles, each permanent monitoring well shall be tested by filling with clear water and observing the rate at which the water falls in the pipe.
 - 4.11.1.1 If the monitoring well does not permit free outflow of water after testing, the Owner may require the Contractor to remove and replace the monitoring well at an adjacent location.
 - 4.11.1.2 The Contractor will not be paid for the additional monitoring well.
- 4.12 Test Pump and Other Equipment
 - 4.12.1 All test pumps required for the hydrogeologic investigation shall be furnished by the Contractor and installed in each well to complete development of the well and to conduct final pumping of the well.
 - 4.12.1.1 A valve shall be installed in the discharge pipe from the pump to control the rate of pumping.
 - 4.12.1.2 Flow shall be measured by a freely discharging orifice of proper dimensions installed at the end of the discharge pipe, together with a transparent plastic manometer tube, or by a calibrated propeller meter.
 - 4.12.1.3 The test pumps shall be capable of operating for the duration of the test being performed without shutdown.
 - 4.12.1.4 Motive power such as a gasoline or diesel engine, or gasoline or diesel engine electric generator set (if an electrically operated pump is furnished) shall be furnished by the Contractor, as will any other equipment or materials required.

- 4.13 Disinfectants
- 4.13.1 The Driller shall disinfect each permanent monitoring well as soon as construction of the well and cleaning procedures have been completed.
- 4.13.1.1 The Driller shall carry out adequate cleaning procedures immediately preceding disinfection where evidence indicates that normal well construction and development work have not adequately cleaned the well.
- 4.13.1.2 All oil, grease, soil, and other materials which could protect bacteria from disinfectants shall be removed from the well.
- 4.13.1.3 The cleaning operation is to be carried out by pumping and swabbing only. Where test pumping equipment is to be used, such equipment shall be installed prior to or during disinfection and shall be thoroughly hosed, scrubbed, or otherwise cleaned of foreign material.
- 4.13.1.4 The Contractor will keep a written log of all disinfection and cleaning procedures.
- 4.13.2 Chlorine or other compounds approved by state or local regulatory agencies shall be used as disinfectants.
- 4.13.2.1 The disinfectant shall be delivered to the site of the work in original sealed containers bearing the original label indicating the percentage of available chlorine.
- 4.13.2.2 Chlorine compounds in dry form shall not be more than one year old, and liquid compounds shall not be more than 60 days old.
- 4.13.2.3 During storage, disinfectants shall not be exposed to the atmosphere or to direct sunlight.
- 4.13.2.4 Unless superseded by governmental regulation, the quantity of chlorine compounds used for disinfection shall be sufficient to produce a minimum of 50 ppm and not more than 200 ppm available chlorine in solution when mixed with the total volume of water in the well. AWWA Standard C 654-03 should be referenced.
- 4.14 Guard Pipe and Concrete Pad
- 4.14.1 The upper end of each monitoring and test production well extending above grade shall be protected by an enclosing steel guard pipe.
- 4.14.2.1 The annular space between the guard pipe and the sampling pipe shall be filled with cement grout
- 4.14.2 For the permanent monitoring wells, the guard pipe and concrete pad shall be formed and poured at each well as indicated on Figure 1.
- 4.14.2.1 Each guard pipe shall be lockable, extend the full depth of the pad, and shall be securely anchored in the concrete.
- 4.14.2.2 The PVC casing will be left with a minimum of two (2) feet extending above grade and equipped with a water-tight cap.
- 4.14.3 The Contractor will secure all wells by using a locking well cap to prevent unauthorized access.
- 4.15 Well Identification
- 4.14.1 A nameplate shall be provided at each permanent monitoring well.
- 4.14.1.1 The nameplate shall be fabricated of aluminum or stainless steel, stamped or engraved with the well number assigned by the Owner with the following legend in letters ½ inch high, **Monitoring Well No. M04-X** where "M" refers to monitoring well, "04" refers to 2004, and "X" refers to the number of the well (i.e., numbers 1 through 6).
- 4.14.2 The nameplate shall be fastened to the guard pipe with cadmium plated screws at each corner.
- 4.14.3 For temporary monitoring wells and test production wells that the Owner chooses to leave in place following the hydrogeologic investigation, the Hydrogeologist will provide a clearly marked, permanent means of identification using the following legends:
- 4.14.3.1 For temporary 2-inch monitoring wells: Monitoring Well No. TM04-X
- 4.14.3.2 For test production wells: Test Well No. TW04-X

- 4.16 Protection of Wells
 - 4.16.1 At all times during the progress of the work, the Contractor shall protect each well in such manner as to effectively prevent either tampering with the well or the entrance of foreign matter into it.
- 4.17 Well Removal
 - 4.17.1 Following completion of the hydrogeologic investigation, the Contractor will consult with the Owner and the Engineer to determine which wells will be properly removed.
- 4.18 Contractor's Responsibility
 - 4.18.1 The Contractor shall be responsible for performing all of the work in strict accordance with these specifications.
 - 4.18.1.1 If evidence indicates that the screen or casing in the well is broken or that the well is not constructed in accordance with the specifications to the satisfaction of the Owner, the Owner may order that proper changes be made by the Contractor, or in the event that proper changes cannot be made, the Owner may order the Contractor to abandon such well without cost to the Owner and to drill a new well.

5. Collector Well Investigation

- 5.1 Computer Modeling of Potential Collector Well Locations
 - 5.1.1 Using the existing MODFLOW computer model of the wellfield, groundwater modeling has been performed by TZA Water Engineers to predict the number and location of additional collector wells that can be constructed on the southern end of the island and along the east bank of the Platte River adjacent to the island without significant interference between wells under a variety of streamflow and recharge conditions.
 - 5.1.1.1 In recent years, most of the flow in the river during drought conditions has generally remained on the eastern side of the island, so both the island and east bank appear to be a favorable locations for collector wells at this time.
 - 5.1.1.2 The results of the computer modeling recently performed by TZA will help determine the exact locations where the hydrogeologic investigation will take place.
 - 5.1.1.3 The Contractor needs to work closely with the Owner, TZA, and the Engineer to determine exact locations for the test borings and wells.
- 5.2 Hydrogeologic Investigation
 - 5.2.1 The hydrogeologic investigation performed under the guidance of the Hydrogeologist will consist of several phases.
 - 5.2.1.1 Phase 1 - Bedrock Determination
 - 5.2.1.2 Phase 2 – Test Borings/Interval Testing
 - 5.2.1.3 Phase 3 – Detailed Aquifer Testing and Water Quality Testing
 - 5.2.1.4 Phase 4 – Data Analysis and Reporting
 - 5.2.2 Phase 1. Bedrock Determination
 - 5.2.2.1 A series of simple test borings using mud rotary drilling techniques will be performed to better define the depths to bedrock along the southern end of the island and along the east bank of the Platte River adjacent to the island
 - 5.2.2.2 The Hydrogeologist will work closely with the Owner and Engineer while each boring is being drilled to assure bedrock has been reached.
 - 5.2.2.3 These test borings will be drilled to fill in data gaps between several test borings that were drilled in the 1970s and 1980s by Layne-Western in an attempt to find the most promising locations for more detailed testing for potential collector wells.
 - 5.2.2.4 Up to twelve (12) of these borings are planned along the island and east bank, similar to the layout shown in Figure 2.
 - 5.2.2.5 These locations have been staked by the Owner and Engineer.

- 5.2.2.6 Several of the locations may need to be adjusted, and the Hydrogeologist will work closely with the Owner and Engineer prior to drilling.
- 5.2.2.7 These bedrock borings are labeled BB-1 through BB-12 on Figure 2.
- 5.2.2.8 To reduce costs, samples will not be collected from these bedrock borings and interval tests will not be performed
- 5.2.2.9 Only bedrock depths will be recorded, along with a field survey of the borings.
- 5.2.2.10 There is a known bedrock ridge across the center of the island and possibly other peaks or valleys in the bedrock that may warrant the need for additional borings.
- 5.2.2.11 The Contractor should plan on twelve (12) bedrock borings using drilling techniques of the Contractor's choice..
- 5.2.2.12 The bedrock depths determined by these boring will be compared to seismic refraction studies completed by Ayers (1987) and Layne-Western (1986).
- 5.2.3 Phase 2. Test Borings/Interval Testing.
 - 5.2.3.1 The next phase will involve drilling, sampling, and hydraulic interval testing at approximately twelve (12) locations (three around each of four potential collector well locations) on the southern half of the island and along the east bank of the Platte River recommended by the supervising Hydrogeologist and approved by the Owner and Engineer.
 - 5.2.3.2 The exact locations of these twelve (12) borings will be determined using the results of the bedrock depth borings from Phase 1.
 - 5.2.3.3 The Hydrogeologist needs to work closely with the Engineer and Owner to determine which of these borings will be converted to permanent 4-inch PVC monitoring wells and which borings will be converted to temporary 2-inch PVC monitoring wells.
 - 5.2.3.4 Since it will not be known prior to drilling whether a boring will be converted to a 2-inch or 4-inch monitoring well, all test borings (except for the Phase 1 bedrock borings described later) will be 8 inches in diameter to meet Nebraska requirements that the bore hole will be at least 4 inches larger in diameter than the casing to be installed.
 - 5.2.3.5 All six (6) of the proposed permanent monitoring wells can be selected from either these twelve (12) test borings or from the borings drilled as part of Phase 3, detailed aquifer testing.
 - 5.2.3.6 Figure 3 shows an example of where the six (6) permanent monitoring wells may be placed.
 - 5.2.3.7 The Contractor may choose either rotasonic or auger drilling techniques for these twelve (12) test borings.
 - 5.2.3.8 A continuous sample is required, and split spoon sampling will be required if there is poor sample recovery.
 - 5.2.3.9 The primary objectives of this phase of testing are to assess the hydraulic conductivity of the sand and gravel aquifer and locate the most favorable sites for detailed aquifer testing.
 - 5.2.3.10 The drilling will be directed by a Hydrogeologist experienced in collector well evaluations who will make necessary decisions for the hydraulic interval testing.
 - 5.2.3.10.1 All borings will be drilled to the underlying bedrock.
 - 5.2.3.10.2 Lithologic samples will be obtained every five (5) feet and at each change in formation materials from the ground surface to the completion depth.
 - 5.2.3.10.3 A detailed log of the materials encountered will be developed during drilling
 - 5.2.3.10.4 Selected samples from the lower 25 feet of formation will be submitted for sieve analyses.
 - 5.2.3.10.5 Upon completion of the project, all samples not selected for sieve analysis will be turned over to the Owner or Engineer for storage/final disposition.

- 5.2.3.11 Sieve analyses will be performed on selected lithologic samples collected from the test borings to determine optimum well screen design specifications and to help evaluate hydraulic conductivity
 - 5.2.3.11.1 Sieve analyses shall be performed according to ASTM D422-63 (Reapproved 2002).
- 5.2.3.12 The Contractor shall keep, in the field, an accurate log of the test boring drilled.
 - 5.2.3.12.1 The Contractor shall keep and maintain a daily report of the number of feet drilling, number of hours on the job, shutdown due to breakdown, the water level in the test boring at the beginning and end of each day and such other pertinent data.
- 5.2.3.13 Hydraulic interval testing will also be conducted on each of the twelve (12) test borings in this phase of work.
 - 5.2.3.13.1 The testing will be conducted to determine the hydraulic conductivity of the selected intervals.
 - 5.2.3.13.2 Hydraulic interval testing will be conducted on a minimum of three (3) intervals in the test borings.
 - 5.2.3.13.3 The intervals to be tested will be selected by the Hydrogeologist on the basis of the drilling and sampling results.
 - 5.2.3.13.4 Upon reaching the total completion depth of each test boring, the casing will be pulled back to the bottom of the interval to be tested, and the screen will be installed in the selected interval using the pull back method.
- 5.2.3.14 Development of the test interval will be accomplished by pumping, bailing and/or air lifting until the water produced is visibly clear and contains little or no sediment.
 - 5.2.3.14.1 The minimum development time shall be two (2) hours.
 - 5.2.3.14.2 Response of the well to development pumping shall be noted so that pumping rates for the hydraulic interval testing can be estimated.
 - 5.2.3.14.3. Refer to Section J of these specifications for additional information on development procedures.
- 5.2.3.15 The test boring will be equipped with a temporary pump capable of pumping a minimum of 200 gallons per minute (gpm).
 - 5.2.3.15.1 Suitable equipment such as an in-line flow meter or free-discharge orifice will be used to accurately determine the pumping rate.
- 5.2.3.16 The selected interval will be pumped for a minimum of two (2) hours.
 - 5.2.3.16.1 The pumping period will be divided into four (4) steps of at least thirty (30) minutes duration
 - 5.2.3.16.2 During each step, the pumping will be maintained at a constant rate.
 - 5.2.3.16.3 The pumping rate will be varied between steps so that the steps are run at approximately 25%, 50%, 75% and 90% of the maximum achievable pumping rate.
 - 5.2.3.16.4 The pumping rate should be adjusted and stabilized as quickly as possible between steps.
 - 5.2.3.16.5 During testing, a water sample can be collected for analysis by the Owner or Engineer for quality screening.
 - 5.2.3.16.6 Water quality will be monitored in the field by the Hydrogeologist for pH, conductivity, and temperature
 - 5.2.3.16.7 Depths to water will be measured to the nearest 0.01 foot in the test boring prior to and during the pumping period.
 - 5.2.3.16.8 The elapsed time of pumping to the nearest minute and the pumping rate associated with each water level measurement will be recorded.
- 5.2.3.17 During each step of the pumping period water level measurements in the test boring will be made on at least the following schedule:

- 5.2.3.17.1 Every 1 minute for 0 to 6 minutes from the start of the step
- 5.2.3.17.2 Every 2 minutes for 6 to 12 minutes from the start of the step
- 5.2.3.17.3 Every 5 minutes after 15 minutes from the start of the step
- 5.2.3.18 At the end of the test pumping period, water levels in the test boring will be monitored for a minimum of 30 minutes of recovery on the same schedule specified for the pumping period.
- 5.2.3.19 Following completion of test borings and hydraulic interval sampling, each test boring shall be properly abandoned to meet local and state requirements, or shall be converted to either a temporary 2-inch PVC monitoring well or a permanent 4-inch PVC monitoring wells to be used during the next phase, detailed aquifer testing.
 - 5.2.3.19.1 The specifications for the monitoring wells are given above.
 - 5.2.3.19.2 Following the collection of all field data, the data will be compiled and analyzed.
 - 5.2.3.19.3 The data collected will be evaluated primarily to determine the most favorable locations for more detailed aquifer testing.
 - 5.2.3.19.4 This determination will be based upon saturated thicknesses, hydraulic conductivities, and logistics.
- 5.2.4 Phase 3. Detailed Aquifer Testing and Water Quality Testing.
 - 5.2.4.1 At the completion of Phase 2, the locations for detailed aquifer testing will be selected by the Hydrogeologist with the concurrence of the Owner and Engineer.
 - 5.2.4.1.1 Detailed aquifer testing will consist of a longer-term pump test using a test production well and several monitoring wells.
 - 5.2.4.1.2 The test well will be pumped at a higher rate over several days for a more accurate assessment of local aquifer characteristics and is required for preliminary design of a collector well.
 - 5.2.4.2 Four (4) detailed aquifer tests will be performed for this investigation: two (2) on the island, and two (2) on the east bank.
 - 5.2.4.2.1 Each detailed aquifer test will include the installation of up to four (4) additional monitoring wells and the installation of one (1) test production well.
 - 5.2.4.2.2 The specifications for the wells are given above. Monitoring wells installed in Phase 2 may reduce the number of additional monitoring wells required
 - 5.2.4.2.3 As currently envisioned, this Phase will include the installation of the following for each aquifer test:
 - 5.2.4.2.3.1 A test production well
 - 5.2.4.2.3.2 Up to four (4) additional borings completed as groundwater monitoring wells, but with good selection of the test borings completed in Phase 2 this number could be less than four.
 - 5.2.4.2.3.2.1 On the island, monitoring wells may be installed in a pattern surrounding each test production well
 - 5.2.4.2.3.2.2 On the east bank, the monitoring wells may be installed in a line parallel to the river.
 - 5.2.4.2.3.2.3 The Hydrogeologist will determine the appropriate locations for the monitoring wells to facilitate the analysis of aquifer characteristics.
 - 5.2.4.2.3.3 A river stilling well located adjacent to the aquifer test to monitor changes in river level.
 - 5.2.4.2.3.3.1 The stilling well should be installed in a manner to accurately measure the level of the river without wave interference.

- 5.2.4.3 The borings for the test production wells and any additional monitoring wells will be drilled to the underlying bedrock.
 - 5.2.4.3.1 Lithologic samples will be obtained every five (5) feet and at each change in formation materials from the ground surface to the completion depth.
 - 5.2.4.3.2 A detailed log of the materials encountered will be developed during drilling.
 - 5.2.4.3.3 A detailed log of the materials encountered will be developed during drilling.
 - 5.2.4.3.4 Selected samples from the lower 25 feet of formation will be submitted for sieve analyses.
 - 5.2.4.3.5 Upon completion of the project, all samples not selected for sieve analysis will be turned over to the Owner or Engineer for storage/final disposition.
- 5.2.4.4 Each monitoring well boring will be converted to either a 2-inch or 4-inch PVC monitoring well equipped with at least 10 feet of screen placed in the lower portion of the formation, or as recommended by the Hydrogeologist.
 - 5.2.4.4.1 The Hydrogeologist will work closely with the Engineer and Owner to determine which of the monitoring wells will be permanent 4-inch wells and which will be temporary 2-inch wells.
 - 5.2.4.4.2 Following installation, the monitoring well will be developed as previously described to assure openness to the aquifer.
- 5.2.4.5 Following or during installation of the monitoring wells at each detailed aquifer test location, a 12-inch ID steel cased test production well will be drilled using cable tool methods.
 - 5.2.4.5.1 The test well will be equipped with continuous-slot wire-wound well screen
 - 5.2.4.5.2 The screen slot size will be dependent upon grain size distribution of the adjacent monitoring wells.
 - 5.2.4.5.3 Details for the test production well are given in previous sections of these specifications.
- 5.2.4.6 Following installation, the test production well will be thoroughly developed using surging and air lift techniques, as previously described.
 - 5.2.4.6.1 The detailed aquifer tests will require a pump capable of producing a minimum of 1000 gpm.
 - 5.2.4.6.2 Discharge from the pump will be measured using a circular free-discharge pipe orifice with water conveyed to the Platte River.
 - 5.2.4.6.3 The pumped water from the aquifer tests shall be discharged onto temporary sheeting to be conveyed to the Platte River in a manner to avoid erosion.
- 5.2.4.7 Aquifer testing will proceed in two parts.
 - 5.2.4.7.1 During both parts, water levels in the wells will be monitored continuously using a computer assisted data acquisition unit (e.g. In Situ 3000) which utilizes pressure transducers.
 - 5.2.4.7.2 The water level in the Platte River will also be monitored during the test using a river stilling well installed adjacent to the aquifer test location.
 - 5.2.4.7.3 Water levels will be measured and monitored to the nearest 0.01 foot.
 - 5.2.4.7.4 Any other wells within 2000 feet of the aquifer testing location(s) will also be monitored periodically.
- 5.2.4.8 The first part of the aquifer test will involve a multiple rate performance test conducted on the test production well.
 - 5.2.4.8.1 This will be a four-hour test conducted in one-hour steps at increasing rates of discharge.
 - 5.2.4.8.2 The test will be evaluated to determine the relative efficiency of the pumping well, confirm the proper operation of all equipment and wells, and determine the discharge rate for the subsequent constant rate test.

- 5.2.4.9 Following full recovery from the short duration multiple rate test, a long-term constant rate test will be conducted in the second part of the aquifer test.
- 5.2.4.9.1 The test will be a minimum of 48 hours in duration, but the length may be extended if steady state conditions are not achieved within 48 hours..
- 5.2.4.9.2 During the test, discharge from the pumping well will be maintained at a constant rate, and the Hydrogeologist will be responsible for collecting water level readings and other data necessary for the proper evaluation of the aquifer for potential collector wells.
- 5.2.4.10 If continuous recorders are not used, the frequency and interval of water level measurements shall be as follows:
- | | | |
|----------------------|------------------|------------------|
| 5.2.4.10.1 | <u>Frequency</u> | <u>Interval</u> |
| PRECEDING PUMPING | 10 minutes | 1 hour |
| PUMPING AND RECOVERY | 1 minute | 0 to 5 minutes |
| | 2 minutes | 5 to 15 minutes |
| | 5 minutes | 15 to 60 minutes |
| | 10 minutes | second hour |
| | 30 minutes | third hour |
| | hourly | to completion |
- 5.2.4.11 The Contractor shall be required to pump the well during the test for the full period without shutdown.
- 5.2.4.11.1 If a shutdown occurs during the test period, the Contractor shall be required to repeat the test the following day without extra cost to the Owner.
- 5.2.4.12 At the conclusion of the test, the pump will be shut off and the recovery of water levels monitored for at least 24 hours or until 90 percent recovery is obtained in the monitoring wells (whichever is longer).
- 5.2.4.13 The pump discharge will be monitored every six hours and river quality every 24 hours for field determinations of temperature, pH, and specific conductance for estimation of TDS.
- 5.2.3.13.1 All electronic monitoring equipment will be removed after each detailed aquifer test.
- 5.2.4.14 One set of groundwater samples will be collected near the end of each of four (4) aquifer tests.
- 5.2.4.14.1 Each set of samples will be collected from the pumped water from the test production well.
- 5.2.4.14.2 The Contractor will need to coordinate with the laboratories listed below to obtain sample containers, preservatives, shipment coolers, and chain-of-custody forms.
- 5.2.3.14.3 The Contractor will notify the Owner and Engineer several days in advance of the end of each aquifer test so the Owner and Engineer can have representatives on-site during sample collection by the Contractor.
- 5.2.4.15 Each set of samples will be analyzed for the following:
- 5.2.4.15.1 temperature, pH, specific conductivity, iron, manganese - tested in field by the Hydrogeologist.
- 5.2.4.15.2 total hardness and alkalinity - A sample will be collected by the Owner to be tested at the treatment plant.
- 5.2.4.15.3 complete drinking water analysis - A sample will be collected by the Hydrogeologist and sent to Environmental Health Laboratories (EHL) to be tested for a complete drinking water analysis.

- 5.2.3.15.3.1 The parameters to be tested are attached at the end of these technical specifications.
 - 5.2.4.15.4 ozone demand and decay - A water sample shall be collected from each test well for bench-scale ozone demand and decay testing.
 - 5.2.4.15.4.1 The ozone demand and decay testing will provide an indication of the treatability of the new wells, as compared to the existing collector wells.
 - 5.2.4.15.4.2 During each aquifer test, one sample from each test well, as well as one sample from an existing collector well, shall be collected.
 - 5.2.4.15.4.3 The Contractor shall request for the samples to be treated with ozone dosages of 1, 2, and 3 mg/L and the resulting ozone residual concentrations shall be measured at 30 seconds, 1, 3, 5, 10, and 15 minutes of elapsed time after adding the ozone.
 - 5.2.4.15.4.4 All testing shall be done at ambient pH conditions and the sample temperature shall be maintained at the temperature measured during the sample collection.
 - 5.2.4.15.4.5 Ozone shall be added to the sample from a concentrated stock ozone solution with a known ozone concentration
 - 5.2.4.15.4.6 All testing shall be by NovaChem Laboratories, Inc. of Oxford, Ohio.
 - 5.2.4.15.5 dissolved gases - measured in the field during each aquifer test
 - 5.2.4.15.5.1 The Engineer or Owner will perform the dissolved gases measurement and will supply the equipment.
- 5.2.4.16 Laboratory costs for these analyses will need to be included in the Contractor's proposal, along with obtaining and summarizing the results in the report.
- 5.2.4.17 Following the detailed aquifer test, the Owner may choose to leave the monitoring wells and test production wells in place, in which case the Hydrogeologist will secure the wells either by welding a steel plate on top of the casing or by using a locking well cap to prevent unauthorized access, so that the wells can be used during subsequent construction or long term monitoring of the wellfield as necessary.
 - 5.2.4.17.1 All wells to be abandoned will be abandoned according to the appropriate Nebraska regulations prior to Driller demobilization.
 - 5.2.4.17.2 The well locations will be returned to their original condition to the satisfaction of the Owner.
 - 5.2.4.17.3 This may include but is not limited to regrading the area to eliminate ruts and piles of drilling spoils and removal of all drilling equipment and materials.
 - 5.2.4.17.4 If the wells are left in place, specifications for completing their installation are given above.
- 5.2.5 Phase 4. Data Analysis/Reporting
 - 5.2.5.1 The Contractor shall submit results following each Phase of the investigation to the Owner and Engineer to determine locations where the subsequent Phases of testing will occur.
 - 5.2.5.2 This work needs to be completed efficiently and in a timely manner to avoid any work delays in the field between Phases.
 - 5.2.5.3 Within one month after completion of all hydrogeologic investigation activities, all data from the previous Phases will be evaluated and included in a concise report on aquifer properties (including transmissivity and specific yield), well efficiencies, potential well interference, aquifer yield, water quality, anticipated water quality issues, water levels, and preliminary well design (including caisson depths, number of laterals, orientation, screen diameters, screen slot openings and screen placement and lengths)

- 5.2.5.4 Estimates will be prepared of anticipated collector well yields to consider average conditions, low winter conditions, and low summer conditions that may be expected.
- 5.2.5.5 These yield computations typically consider anticipated river/ground water levels and water temperatures, among other criteria.
- 5.2.5.6 All data including copies of drilling logs, sieve analyses, time versus draw down data, groundwater elevations, pumping rates, Driller's diary of information, survey information, water quality analyses, and calculations shall be submitted with the report.
- 5.2.5.7 The analysis shall state assumptions made and basis upon which they were arrived.
- 5.2.5.8 The Contractor will submit a draft of the report, make revisions to the document based on comments provided by the Owner, and then submit five (5) copies of the final report.

**Lincoln Water System
Platte River Wellfield
Hydrogeologic Investigation
Technical Specifications
Spec. No. 04-129**

SECTION B

1. Measurement and Payment
 - 1.2 This section covers methods of measurement and payment for items of Work under this contract.
2. General
 - 2.1 The total price bid for each item of work shall cover all Work required by the Contract Documents.
 - 2.1.1 All costs in connection with the proper and successful completion of the Work, including furnishing all materials, equipment, supplies, and appurtenances; providing all construction plant, equipment, and tools; and performing all necessary labor and supervision to fully complete the Work, shall be included in the unit and prices bid.
 - 2.1.2 All Work not specifically set forth as an adjustment item in the Bid Form shall be considered a subsidiary obligation of Contractor and all costs in connection therewith shall be included in the prices bid.
3. Estimated Quantities
 - 3.1 All estimated quantities for unit prices stipulated in the bid form or other Contract Documents are approximate and are to be used only (a) as a basis for estimating the probable cost of the Work and (b) for the purpose of comparing the bids submitted for the Work.
 - 3.1.1 The actual amounts of work done and materials furnished under unit price items may differ from the estimated quantities.
 - 3.1.2 Contractor agrees that he will make no claim for damages, anticipated profits, or otherwise on account of any difference between the amounts of work actually performed and materials actually furnished and the estimated amounts therefore.
 - 3.1.3 The adjustment unit prices shall be applicable to all bid sections.
4. Basis of Bid and Adjustment Unit Prices
 - 4.1 The unit price bid for each bid section shall encompass all work required to complete the work in accordance with the plans and specifications with limits on quantities and adjustment in payment of certain items of work as follows:
 - 4.1.1 Access Road.
 - 4.1.1.1 The bid shall include a total length of 7,000 linear feet for access road to the testing locations, turn-around areas, and work areas at each testing location.
 - 4.1.1.2 The bid shall include all costs incurred to clear, grade, and/or grub the path for the necessary equipment to reach the testing locations and perform all of the Work detailed in this bid document.
 - 4.1.2 Mobilization for Bedrock Test Boring Equipment (Phase 1)
 - 4.1.2.1 This work shall consist of preparatory work and operations, associated with the necessary movement of personnel, equipment, supplies and incidentals to the project site and for all the work and operations which must be performed or costs that are necessarily incurred prior to commencing the work.
 - 4.1.2.2 The Contractor shall include all expected costs for movement of his and any subcontractors' equipment and material necessary to prosecute the work to completion, including any demobilization.
 - 4.1.2.3 Additional payments will not be made for interruptions in the prosecution of the project of if the Contractor fails to adequately assess the actual costs of mobilization.

- 4.1.2.4 No measurement is required.
- 4.1.2.5 Fifty percent of the bid item for mobilization will be paid with the initial pay estimate.
- 4.1.2.6 The balance of the bid item for mobilization will be paid when twenty percent of the value of the work has been completed.
- 4.1.2.7 The bid shall include all costs incurred for mobilizing and demobilizing to the Work site all equipment and materials required for the Phase 1 test borings required to determine depth to bedrock as detailed in this bid document
- 4.1.3 Bedrock Test Borings (Phase 1)
 - 4.1.3.1 The bid shall include a total depth of 90 linear feet for each bedrock test boring.
 - 4.1.3.2 The bid shall include all costs incurred for the bedrock test borings including but not limited to set up, drill the boring, temporary casing, record information, move between sites, abandon the hole, and use the information to decide where subsequent testing will be performed as detailed in this bid document.
 - 4.1.3.3 None of the bedrock test borings from Phase 1 will be converted to monitoring wells.
 - 4.1.3.4 This bid item does not include construction of access roads, as this item is covered elsewhere in this bid.
 - 4.1.3.5 The unit adjustment price will be used as a basis to adjust the bid price for variations in the total number of borings from that indicated.
- 4.1.4 Mobilization for Test Borings/ Interval Testing (Phase 2)
 - 4.1.4.1 This work shall consist of preparatory work and operations, associated with the necessary movement of personnel, equipment, supplies and incidentals to the project site and for all the work and operations which must be performed or costs that are necessarily incurred prior to commencing the work.
 - 4.1.4.2 The Contractor shall include all expected costs for movement of his and any subcontractors' equipment and material necessary to prosecute the work to completion, including any demobilization.
 - 4.1.4.3 Additional payments will not be made for interruptions in the prosecution of the project of if the Contractor fails to adequately assess the actual costs of mobilization.
 - 4.1.4.4 No measurement is required.
 - 4.1.4.5 Fifty percent of the bid item for mobilization will be paid with the initial pay estimate.
 - 4.1.4.6 The balance of the bid item for mobilization will be paid when twenty percent of the value of the work has been completed.
 - 4.1.4.7 The bid shall include all costs incurred for mobilizing and demobilizing to the Work site all equipment and materials required for the test borings and hydraulic interval testing as detailed in this bid document.
- 4.1.5 Subsequent Site Moves (Phase 2)
 - 4.1.5.1 The bid shall include a total of 11 subsequent site moves for Phase 2.
 - 4.1.5.2 The bid shall include all costs incurred for moving equipment and materials between testing locations for Phase 2 testing.
 - 4.1.5.3 This bid item does not include construction of access roads and work areas, as this item is covered elsewhere in this bid.
 - 4.1.5.4 The unit adjustment price will be used as a basis to adjust the bid price for variations in the total number of borings from that indicated.
- 4.1.6 Drilling and Sampling of 8-inch Diameter Bore Holes (Phase 2)
 - 4.1.6.1 The bid shall include a total depth of 90 linear feet for each of the 12 test borings in Phase 2.

- 4.1.6.2 The bid shall include all costs incurred for drilling and sampling including but not limited to set up, drill the boring, sample, and perform sieve analyses, as detailed in this bid document.
- 4.1.6.3 It will not be known before drilling whether the boring will be converted to a 4-inch permanent monitoring well or a 2-inch temporary monitoring well, so all bore holes in Phase 2 for monitoring wells will be 8 inches in diameter to meet Nebraska regulations that the boring be at least 4 inches in diameter larger than the casing diameter.
- 4.1.6.4 The unit adjustment price will be used as a basis to adjust the bid price for variations in the total number of borings from that indicated.
- 4.1.7 Hydraulic Interval Testing (Phase 2)
 - 4.1.7.1 The bid shall include a total of 12 hydraulic interval tests for Phase 2.
 - 4.1.7.2 The bid shall include all costs incurred, including but not limited to set up, pulling back of casing, setting screen, well development, pumping, monitoring water levels, and completion of other appurtenant work to perform the hydraulic interval testing.
 - 4.1.7.3 The unit adjustment price will be used as a basis to adjust the bid price for variations in the total number of borings from that indicated.
- 4.1.8 Conversion of Test Borings to Temporary 2-inch Monitoring Wells (Phase 2)
 - 4.1.8.1 It will not be known prior to drilling how many of the Phase 2 test borings will be converted to temporary 2-inch monitoring wells and how many of the Phase 2 test borings will be converted to 4-inch permanent monitoring wells.
 - 4.1.8.2 For purposes of this bid, it will be assumed that 10 of the 12 test borings drilled in Phase 2 will be converted to temporary 2-inch monitoring wells.
 - 4.1.8.3 The bid shall include a total depth of 90 feet for each temporary 2-inch monitoring well, and include all costs incurred for completion of the 2-inch monitoring wells as detailed in this bid document, including well development.
 - 4.1.8.4 The unit adjustment price will be used as a basis to adjust the bid price for variations in the total number of Phase 2 borings that are converted to temporary 2-inch monitoring wells from that indicated.
- 4.1.9 Conversion of Test Borings to Permanent 4-inch Monitoring Wells (Phase 2)
 - 4.1.9.1 It will not be known prior to drilling how many of the Phase 2 test borings will be converted to permanent 4-inch monitoring wells.
 - 4.1.9.2 For purposes of this bid, it will be assumed that 2 of the 12 test borings drilled in Phase 2 will be converted to permanent 4-inch monitoring wells.
 - 4.1.9.3 The bid shall include a total depth of 90 feet for each permanent 4-inch monitoring well, and include all costs incurred for completion of the 4-inch monitoring wells as detailed in this bid document, including well development.
 - 4.1.9.4 The unit adjustment price will be used as a basis to adjust the bid price for variations in the total number of Phase 2 borings that are converted to permanent 4-inch monitoring wells from that indicated.
- 4.1.10 Mobilization for Detailed Aquifer Testing (Phase 3)
 - 4.1.10.1 This work shall consist of preparatory work and operations, associated with the necessary movement of personnel, equipment, supplies and incidentals to the project site and for all the work and operations which must be performed or costs that are necessarily incurred prior to commencing the work.
 - 4.1.10.2 The Contractor shall include all expected costs for movement of his and any subcontractors' equipment and material necessary to prosecute the work to completion, including any demobilization.
 - 4.1.10.3 Additional payments will not be made for interruptions in the prosecution of the project if the Contractor fails to adequately assess the actual costs of mobilization.

- 4.1.10.4 No measurement is required.
- 4.1.10.5 Fifty percent of the bid item for mobilization will be paid with the initial pay estimate.
- 4.1.10.6 The balance of the bid item for mobilization will be paid when twenty percent of the value of the work has been completed.
- 4.1.10.7 The bid shall include all costs incurred for mobilizing and demobilizing to the Work site all equipment and materials required for the detailed aquifer testing in Phase 3 as detailed in this bid document.
- 4.1.11 Subsequent Site Moves (Phase 3)
 - 4.1.11.1 The bid shall include a total of 3 subsequent site moves for Phase 3. The bid shall include all costs incurred for moving equipment and materials between detailed aquifer testing locations for Phase 3. This bid item does not include construction of access roads and work areas, as this item is covered elsewhere in this bid. The unit adjustment price will be used as a basis to adjust the bid price for variations in the total number of detailed aquifer tests from that indicated.
- 4.1.12 Drilling and Sampling of 8-inch Diameter Bore Holes for Monitoring Wells (Phase 3).
 - 4.1.12.1 The bid shall include a total depth of 90 linear feet for each of the 16 monitoring well borings in Phase 3 (4 monitoring wells at each of 4 detailed aquifer testing locations).
 - 4.1.12.2 The bid shall include all costs incurred for drilling and sampling including but not limited to set up, drill the boring, sample, and perform sieve analyses, as detailed in this bid document.
 - 4.1.12.3 It will not be known before drilling whether the boring will be converted to a 4-inch permanent monitoring well or a 2-inch temporary monitoring well, so all bore holes in Phase 3 for monitoring wells will be 8 inches in diameter to meet Nebraska regulations that the boring be at least 4 inches in diameter larger than the casing diameter.
 - 4.1.12.4 The unit adjustment price will be used as a basis to adjust the bid price for variations in the total number of monitoring wells required for Phase 3 from that indicated.
- 4.1.13 Conversion of Test Borings to Temporary 2-inch Monitoring Wells (Phase 3)
 - 4.1.13.1 It will not be known prior to drilling how many of the Phase 3 monitoring well borings will be converted to temporary 2-inch monitoring wells and how many of the Phase 3 monitoring well borings will be converted to 4-inch permanent monitoring wells.
 - 4.1.13.2 For purposes of this bid, it will be assumed that 12 of the 16 monitoring well borings drilled in Phase 3 will be converted to temporary 2-inch monitoring wells.
 - 4.1.13.3 The bid shall include a total depth of 90 feet for each temporary 2-inch monitoring well, and include all costs incurred for completion of the 2-inch monitoring wells as detailed in this bid document, including well development.
 - 4.1.13.4 The unit adjustment price will be used as a basis to adjust the bid price for variations in the total number of Phase 3 borings that are converted to temporary 2-inch monitoring wells from that indicated.
- 4.1.14 Conversion of Test Borings to Permanent 4-inch Monitoring Wells (Phase 3)
 - 4.1.14.1 It will not be known prior to drilling how many of the Phase 3 monitoring well borings will be converted to permanent 4-inch monitoring wells.
 - 4.1.14.2 For purposes of this bid, it will be assumed that 4 of the 16 monitoring well borings drilled in Phase 3 will be converted to permanent 4-inch monitoring wells.
 - 4.1.14.3 The bid shall include a total depth of 90 feet for each permanent 4-inch monitoring well, and include all costs incurred for completion of the permanent 4-inch monitoring wells as detailed in this bid document, including well development.
 - 4.1.14.3 The unit adjustment price will be used as a basis to adjust the bid price for variations in the total number of Phase 3 borings that are converted to permanent 4-inch monitoring wells from that indicated.

- 4.1.15 Drilling and Sampling of Test Production Wells (Phase 3)
 - 4.1.15.1 The bid shall include a total of 4 test production wells (one for each of the Phase 3 detailed aquifer tests), including a total of 90 feet for each of the wells and a bore hole diameter that is 4 inches larger than the casing to be used.
 - 4.1.15.2 The bid shall include all costs incurred for drilling and sampling including but not limited to set up, drill the boring, well development, sample, and perform sieve analyses, as detailed in this bid document.
 - 4.1.15.3 The unit adjustment price will be used as a basis to adjust the bid price for variations in the total number of detailed aquifer tests from that indicated.
- 4.1.16 Detailed Aquifer Testing (Phase 3)
 - 4.1.16.1 The bid includes a total of 4 detailed aquifer tests.
 - 4.1.16.2 The bid shall include all costs incurred for the detailed aquifer testing including but not limited to testing, installing and removing test pumps and discharge lines, pumping, monitoring water levels, controlling erosion, installing and monitoring river level gauges, and completion of other appurtenant work as detailed in this bid document.
 - 4.1.16.3 The unit adjustment price will be used as a basis to adjust the bid price for variations in the total number of detailed aquifer tests from that indicated.
- 4.1.17 Detailed Water Quality Sampling and Analysis (Phase 3)
 - 4.1.17.1 This bid includes a total of 4 detailed water quality sampling and analyses (one complete set for each of 4 detailed aquifer tests).
 - 4.1.17.2 The bid shall include all costs incurred for water quality sampling and analysis, including but not limited to obtaining sampling containers, coordination with laboratories, shipment of the samples, analysis, and obtaining and reporting the results, as detailed in this bid document.
- 4.1.18 Field Survey
 - 4.1.18.1 The bid shall include all costs incurred for having a field survey performed for all borings, wells, and river level gauges from Phase 1, Phase 2, and Phase 3, as detailed in this bid document.
 - 4.1.18.2 This bid includes a total of 12 bedrock test borings from Phase 1; 12 monitoring wells from Phase 2; and 16 monitoring wells, 4 test production wells, and 4 river level gauges from Phase 3; for a total of 48 locations (points) to be surveyed.
 - 4.1.18.3 The unit adjustment price will be used as a basis to adjust the bid price for variations in the total number of points from that indicated.
- 4.1.19 Monitoring Well Abandonment
 - 4.1.19.1 The bid shall include a total of 22 temporary monitoring wells (2-inch) to be abandoned.
 - 4.1.19.2 The bid shall include all costs incurred to abandon the wells, including but not limited to pull the casing and screen, fill the bore hole, seal, and all appurtenant work as detailed in this bid document.
 - 4.1.19.3 The unit adjustment price will be used as a basis to adjust the bid price for variations in the total number of monitoring wells to be abandoned from that indicated.
- 4.1.20 Test Production Well Abandonment
 - 4.1.20.1 The bid shall include a total of 4 test production wells to be abandoned.
 - 4.1.20.2 The bid shall include all costs incurred to abandon the wells, including but not limited to pull the casing and screen, fill the bore hole, seal, and all appurtenant work.
 - 4.1.20.3 The unit adjustment price will be used as a basis to adjust the bid price for variations in the total number of test production wells to be abandoned from that indicated.

4.1.21 Data Reporting

- 4.1.21.1 The bid shall include all costs incurred to prepare and submit draft and final copies of the hydrogeologic report documenting the findings of this investigation, as detailed in this bid document.

Section C

1. Timeline

1.1 CIP Project 506010 Hydrogeological Investigation-LWS Wellfield

1.1.1 Bids Due May 19, 2004

1.1.2 Notice to Proceed, June 2, 2004

1.1.3 Substantial Completion

1.1.3.1 Nine months from Notice to Proceed

1.1.4 Final Completion

1.1.4.1 Eleven months from Notice to Proceed

**Lincoln Water System
Platte River Wellfield
Hydrogeologic Investigation
Technical Specifications
Spec. No. 04-129**

1. Supplemental Conditions
 - 1.1 These supplemental conditions amend and supplement the General Conditions.
 - 1.2 All provisions of the General Conditions that are amended and supplemented remain in full force and effect as so amended or supplemented.
 - 1.3 All provisions of the General Conditions which are not so amended or supplemented remain in full force and effect.
2. Temporary Facilities
 2. OFFICE AT SITE OF WORK.
 - 2.1 During the performance of this Contract, CONTRACTOR shall maintain a suitable office at or near the Site which shall be the headquarters of its representative authorized to receive drawings, instructions, or other communication or articles.
 - 2.1.1 Any communication given to the said representative or delivered at CONTRACTOR's office at the Site in the representative's absence shall be deemed to have been delivered to CONTRACTOR.
 - 2.2 Copies of the Drawings, Specifications, and other Contract Documents shall be kept at CONTRACTOR's office at the Site and available for use at all times.
 - 2.3 In addition, CONTRACTOR shall provide a suitable field office with at least 200 square feet of floor space, either adjacent to or partitioned off from his office at the Site, for use of the Resident Project Representative and inspectors.
 - 2.3.1 The office shall be provided with an outside entrance door with a substantial lock; glazed windows suitable for light and ventilation; and adequate heating, air conditioning, and lighting facilities.
 - 2.3.2 CONTRACTOR shall pay all electricity and heating bills, provide telephone service as specified herein, and provide weekly janitorial service to sweep and mop the floors.
 - 2.3.3 The office shall be furnished with a desk, a four-drawer filing cabinet, a worktable, two cushioned swivel chairs, a plan rack, a three shelf bookcase, a waste basket, and a locker for storage of surveying instruments.
 - 2.3.4 The doors on the locker shall be equipped for padlocking.
 - 2.3.5 The general arrangement of the office and facilities provided shall be acceptable to the OWNER.
3. WATER.
 - 3.1 All water required for and in connection with the Work to be performed and for any specified tests of piping, equipment, devices, and appurtenances, shall be provided by and at the expense of the CONTRACTOR.
 - 3.2 No separate payment for water used or required will be made and all costs in connection therewith shall be included in the Bid.
4. POWER.
 - 4.1 CONTRACTOR shall provide all power for operation of CONTRACTOR's plant or equipment, or for any other use by CONTRACTOR.
5. TELEPHONE SERVICE.
 - 5.1 CONTRACTOR shall have a cellular phone on site at all times for communication with the OWNER and ENGINEER.

6. SANITARY FACILITIES.
 - 6.1 CONTRACTOR shall furnish temporary sanitary facilities at the Site, as provided herein, for the needs of all construction workers and others performing work or furnishing services on the Project.
 - 6.2 Sanitary facilities shall be of reasonable capacity, properly maintained throughout the construction period, and obscured from public view to the greatest practical extent.
 - 6.3 If toilets of the chemically treated type are used, at least one toilet will be furnished for each 20 persons.
 - 6.4 CONTRACTOR shall enforce the use of such sanitary facilities by all personnel at the Site.
7. FENCES.
 - 7.1. All existing fences affected by the Work shall be maintained by CONTRACTOR until completion of the Work.
 - 7.2 Fences which interfere with construction operations shall not be relocated or dismantled until written permission is obtained from the owner of the fence, and the period the fence may be left relocated or dismantled has been agreed upon.
 - 7.3 Where fences must be maintained across the construction easement, adequate gates shall be installed.
 - 7.4 Gates shall be kept closed and locked at all times when not in use.
 - 7.5 On completion of the Work across any tract of land, CONTRACTOR shall restore all fences to their original or to a better condition and to their original locations.
8. DAMAGE TO EXISTING PROPERTY.
 - 8.1. CONTRACTOR will be held responsible for any damage to existing structures, Work, materials, or equipment because of his operations and shall repair or replace any damaged structures, Work, materials, or equipment to the satisfaction of, and at no additional cost to, OWNER.
 - 8.2 CONTRACTOR shall protect all existing structures and property from damage and shall provide bracing, shoring, or other work necessary for such protection.
 - 8.3 CONTRACTOR shall be responsible for all damage to streets, roads, curbs, sidewalks, highways, shoulders, ditches, embankments, culverts, bridges, or other public or private property, which may be caused by transporting equipment, materials, or workers to or from the Work. CONTRACTOR shall make satisfactory and acceptable arrangements with the agency having jurisdiction over the damaged property concerning its repair or replacement.
9. TREE AND PLANT PROTECTION.
 - 9.1 All trees and other vegetation which must be removed to perform the Work shall be removed and disposed of by CONTRACTOR; however, no trees or cultured plants shall be unnecessarily removed unless their removal is indicated on the Drawings.
 - 9.2 No trees larger than 12 inches in diameter shall be removed.
 - 9.3 All trees and plants not removed shall be protected against injury from construction operations.
 - 9.4 Trees considered by ENGINEER to have any significant effect on construction operations are indicated on the Drawings and those which are to be preserved are so indicated.
 - 9.5 CONTRACTOR shall take extra measures to protect trees designated to be preserved, such as erecting barricades, trimming to prevent damage from construction equipment, and installing pipe and other Work by means of hand excavation or tunneling methods.
 - 9.6 Such trees shall not be endangered by stockpiling excavated material or storing equipment against their trunks.

- 9.7 When injuring or removal of trees designated to be preserved cannot be avoided, or when removal and replacement is indicated on the Drawings, each tree injured beyond repair or removed shall be replaced with a similar tree of the nearest size possible.
- 9.8 All trimming, repair, and replacement of trees and plants shall be performed by qualified nurserymen or horticulturists.
- 10. SECURITY.
 - 10.1 CONTRACTOR shall be responsible for protection of the Site, and all Work, materials, equipment, and existing facilities thereon, against vandals and other unauthorized persons.
 - 10.2 No Claim shall be made against OWNER by reason of any act of an employee or trespasser, and CONTRACTOR shall make good all damage to OWNER's property resulting from CONTRACTOR's failure to provide security measures as specified.
 - 10.3 Security measures shall be at least equal to those usually provided by OWNER to protect OWNER's existing facilities during normal operation, but shall also include such additional security fencing, barricades, lighting, and other measures as required to protect the Site.
- 11. ACCESS ROADS.
 - 11.1 CONTRACTOR shall establish and maintain temporary access roads to various parts of the Site as required to complete the Project.
 - 11.2 Such roads shall be available for the use of all others performing work or furnishing services in connection with the Project.
- 12. PARKING.
 - 12.1 CONTRACTOR shall provide and maintain suitable parking areas for the use of all workers and others performing work or furnishing services in connection with the Project, as required to avoid any need for parking personal vehicles where they may interfere with public traffic, OWNER's operations, or construction activities.
- 13. NOISE CONTROL.
 - 13.1 CONTRACTOR shall take reasonable measures to avoid unnecessary noise.
 - 13.2 Such measures shall be appropriate for the normal ambient sound levels in the area during working hours.
 - 13.3 All construction machinery and vehicles shall be equipped with practical sound-muffling devices, and operated in a manner to cause the least noise consistent with efficient performance of the Work.
 - 13.4 During construction activities on or adjacent to occupied buildings, and when appropriate, CONTRACTOR shall erect screens or barriers effective in reducing noise in the building and shall conduct its operations to avoid unnecessary noise which might interfere with the activities of building occupants.
- 14. DUST CONTROL.
 - 14.1 CONTRACTOR shall take reasonable measures to prevent unnecessary dust.
 - 14.2 Earth surfaces subject to dusting shall be kept moist with water or by application of a chemical dust suppressant.
 - 14.3 When practicable, dusty materials in piles or in transit shall be covered to prevent blowing dust.
 - 14.4 Buildings or operating facilities which may be affected adversely by dust shall be adequately protected from dust.
 - 14.5 Existing or new machinery, motors, instrument panels, or similar equipment shall be protected by suitable dust screens.
 - 14.6 Proper ventilation shall be included with dust screens.
- 15. TEMPORARY DRAINAGE PROVISIONS.
 - 15.1 CONTRACTOR shall provide for the drainage of storm water and such water as may be applied or discharged on the Site in performance of the Work.
 - 15.2 Drainage facilities shall be adequate to prevent damage to the Work, the Site, and adjacent property.

- 15.3 Existing drainage channels shall be protected, cleaned, enlarged, or supplemented as necessary to carry all increased runoff or discharge attributable to CONTRACTOR's operations.
- 15.4 Dikes shall be constructed as necessary to divert increased runoff or discharge to protect OWNER's facilities and the Work, and to direct water to drainage channels without causing erosion.
- 16. EROSION CONTROL.
 - 16.1 CONTRACTOR shall prevent erosion of soil on the Site and adjacent property resulting from its construction activities.
 - 16.2 Effective measures shall be initiated prior to the commencement of clearing, grading, excavation, or other operation that will disturb the natural protection.
 - 16.3 Work shall be scheduled to expose areas subject to erosion for the shortest possible time, and natural vegetation shall be preserved to the greatest extent practicable.
 - 16.4 Temporary storage and construction buildings shall be located, and construction traffic routed, to minimize erosion.
 - 16.5 Temporary fast-growing vegetation or other suitable ground cover or man-made materials shall be provided as necessary to control runoff.
- 17. POLLUTION CONTROL.
 - 17.1 CONTRACTOR shall prevent the pollution of drains and watercourses by sanitary wastes, sediment, debris, and other substances resulting from construction activities.
 - 17.2 No sanitary wastes shall be permitted to enter any drain or watercourse other than sanitary sewers.
 - 17.3 No sediment, debris, or other substance shall be permitted to enter sanitary sewers, and reasonable measures shall be taken to prevent such materials from entering any drain or watercourse.
- 18. CONSTRUCTION AIDS.
 - 18.1 CONTRACTOR shall furnish, install, maintain, and operate all construction aids required by him and his Subcontractors in the performance of the Work, except as otherwise provided herein.
 - 18.2 The use of any of the OWNER's equipment, whether furnished and installed under this contract or not will be only with OWNER's written permission.
- 19. FLOOD PROTECTION.
 - 19.1 Some of the facilities are located in a flood hazard area.
 - 19.2 During the construction and testing period, CONTRACTOR shall provide temporary protection as necessary to prevent flood damage to new and existing facilities and shall be responsible for any damage which may result from flooding.

Bidder _____

BID PROPOSAL
SPECIFICATION NO. 04-129
BID OPENING TIME: 12:00 NOON
DATE: Wednesday, May 19, 2004

The undersigned, having full knowledge of the requirements of the City of Lincoln for the below listed phases and the contract documents (which include Notice, Instructions, this Proposal, Specifications, Contract, and any and all addenda) and all other conditions of the Proposal, agrees to enter into a contract with the City the below listed fees for the performance of this Specification, complete in every respect, in strict accordance with the contract documents at and for fees listed below.

ADDENDA RECEIPT: The receipt of addenda to the specification numbers _____ through _____ are hereby acknowledged. Failure of any submitter to receive any addendum or interpretation of the specifications shall not relieve the submitter from any obligations specified in the request. All addenda shall become part of the final contract document.

Item No.	Description	Total Number	Unit	Unit cost	Total Cost
1.	Access Road	7,000	linear ft	\$_____	\$_____
2.	Mobilization for Bedrock Test Boring Equipment (Phase 1)	1	lump sum	\$_____	\$_____
3.	Bedrock Test Borings (Phase 1)	12	each	\$_____	\$_____
4.	Mobilization for Test Borings/ Interval Testing (Phase 2)	1	lump sum	\$_____	\$_____
5.	Subsequent Site Moves (Phase 2)	11	each	\$_____	\$_____
6.	Drilling and Sampling of 8-inch Diameter Bore Holes (Phase 2)	12	each	\$_____	\$_____
7.	Hydraulic Interval Testing (Phase 2)	12	each	\$_____	\$_____
8.	Conversion of Test Borings to Temporary 2-inch Monitoring Wells (Phase 2)	10	each	\$_____	\$_____
9.	Conversion of Test Borings to Permanent 4-inch Monitoring Wells (Phase 2)	2	each	\$_____	\$_____
10.	Mobilization for Detailed Aquifer Testing (Phase 3)	1	lump sum	\$_____	\$_____
11.	Subsequent Site Moves (Phase 3)	1	each	\$_____	\$_____
12.	Drilling and Sampling of 8-inch Diameter Bore Holes for Monitoring Wells (Phase 3)	16	each	\$_____	\$_____
13.	Conversion of Test Borings to Temporary 2-inch Monitoring Wells (Phase 3)	12	each	\$_____	\$_____

			Bidder _____		
Item No.	Description		Unit	Unit cost	Total Cost
14.	Conversion of Test Borings to Permanent 4-inch Monitoring Wells (Phase 3)	4	each	\$_____	\$_____
15.	Drilling and Sampling of Test Production Wells (Phase 3)	4	each	\$_____	\$_____
16.	Detailed Aquifer Testing (Phase 3)	4	each	\$_____	\$_____
17.	Detailed Water Quality Sampling and Analysis (Phase 3)	4	each	\$_____	\$_____
18.	Field Survey	48	points	\$_____	\$_____
19.	Monitoring Well Abandonment	22	each	\$_____	\$_____
20.	Test Production Well Abandonment	4	each	\$_____	\$_____
21.	Data Reporting	1	lump sum	\$_____	\$_____

BID SECURITY REQUIRED YES 5% of Total Bid Price TOTAL PRICE \$_____

Submittals to include resumes of key personnel, evidence of qualification to perform, similar project form and evidence of licensure for Nebraska.

The undersigned signatory for the bidder represents and warrants that he has full and complete authority to submit this proposal to the City, and to enter into a contract if this proposal is accepted.

**RETURN 2 COMPLETE COPIES OF PROPOSAL AND SUPPORTING MATERIAL.
MARK OUTSIDE OF BID ENVELOPE: SEALED BID FOR SPEC. 04-129**

COMPANY NAME

BY (Signature)

STREET ADDRESS or P.O. BOX

(Print Name)

CITY, STATE ZIP CODE

(Title)

TELEPHONE No. FAX No.

(Date)

EMPLOYER'S FEDERAL I.D. NO.
OR SOCIAL SECURITY NUMBER

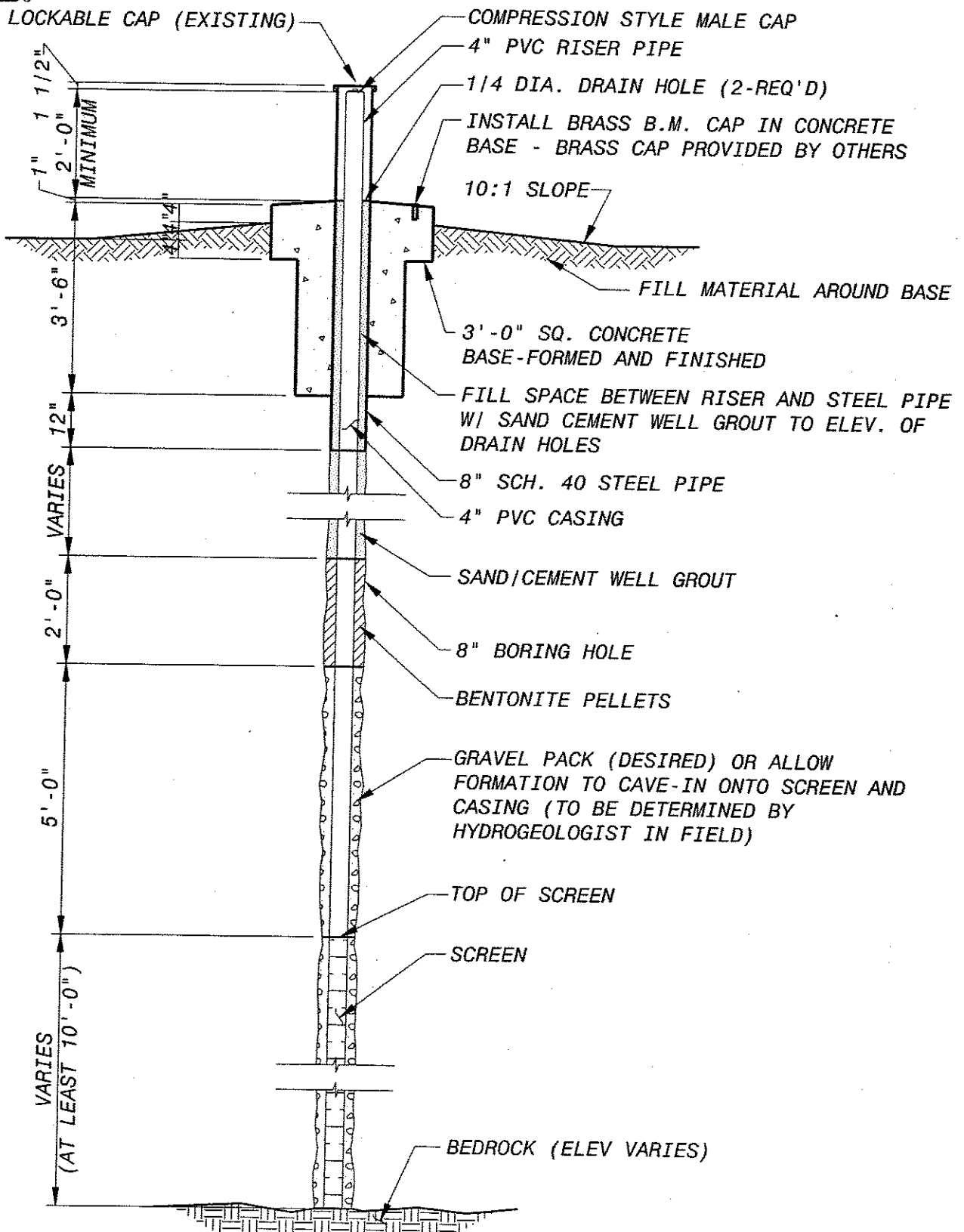
ESTIMATED DELIVERY DAYS

E-MAIL ADDRESS

TERMS OF PAYMENT

Bids may be inspected in the Purchasing Division offices during normal business hours, after tabulation by the purchasing agent.

If you desire a copy of the bid tabulation to be mailed to you, you must enclose a self-addressed stamped envelope with your bidding documents. Bid tabulations can also be viewed on our website at:
<http://www.ci.lincoln.ne.us/city/finance/purch/specindx.htm>



TYPICAL GROUNDWATER MONITORING WELL TERMINATION DETAIL

FIGURE 1

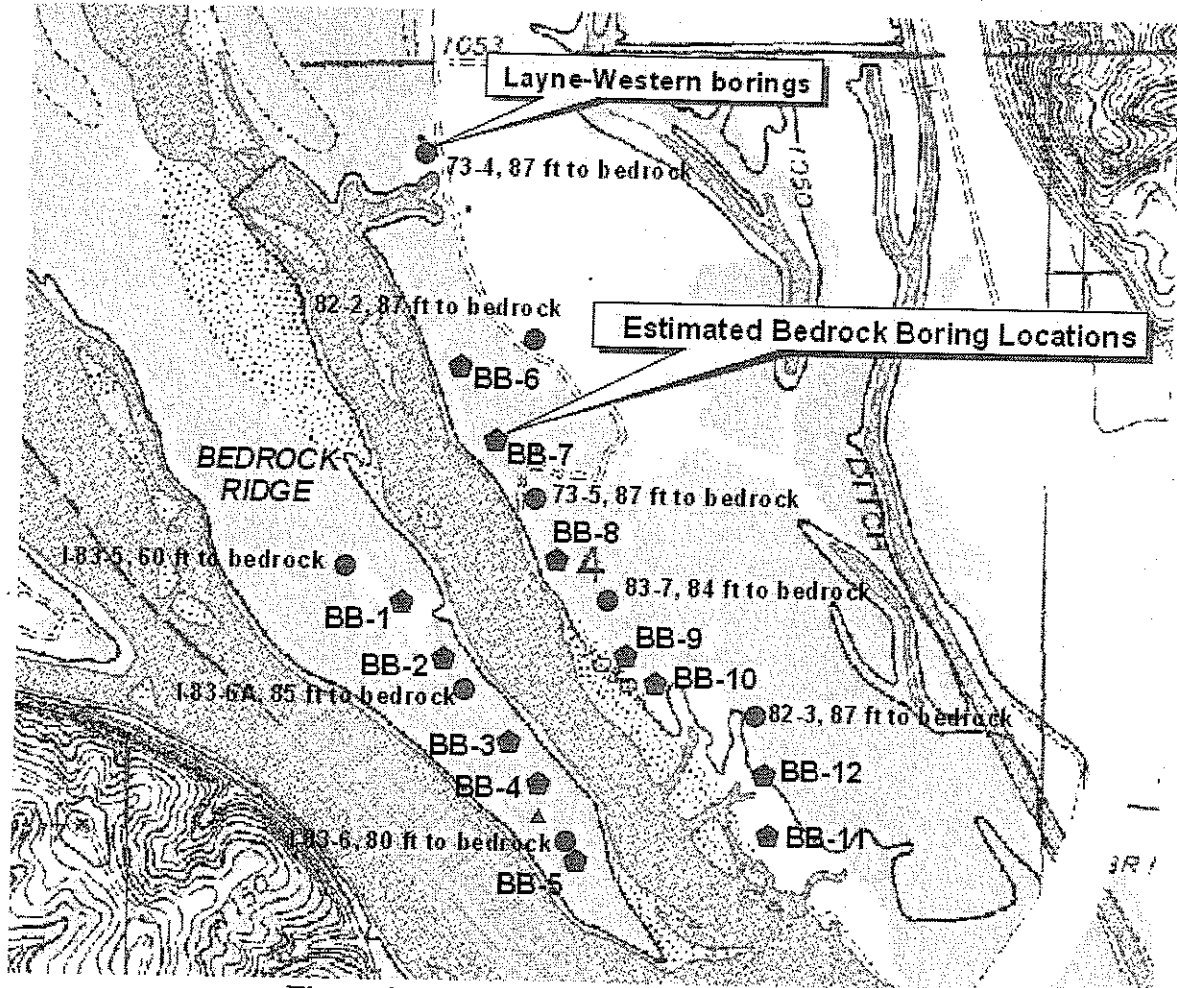


Figure 2. Proposed Locations of Mud-Rotary Borings to Determine Bedrock Depths (subject to change)

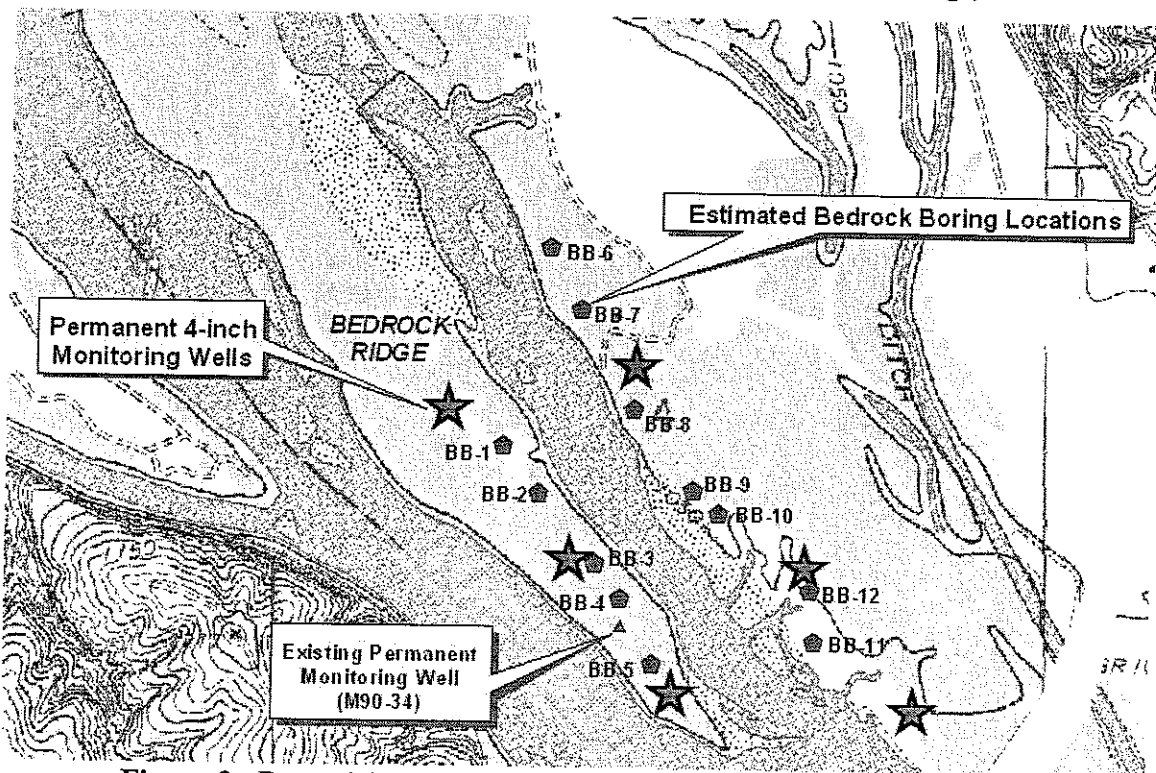


Figure 3. Potential Locations for Six Permanent Monitoring Wells (subject to change based on testing results)

Water Quality Analyses
LWS Hydrogeologic
Investigation
2004

Each of these analyses
will be performed for
each of the detailed
aquifer test sites

Analysis	Method	Analyte	Minimum Detection Limit	EPA Maximum Contaminant Limit
Acid Digestion	DW/200 Series	Acid Digestion	N/A	
Acrylamide	DW/8316	Acrylamide	5 ug/l	0.05% dosed at 1 mg/l (TT)
Aluminum	DW/200.8	Aluminum	2 ug/l	50 ug/l
Antimony	DW/200.8	Antimony	1 ug/l	6 ug/l
Arsenic	DW/200.8	Arsenic	2 ug/l	10 ug/l
Asbestos	DW/100.1,100.2	Asbestos	0.2 mf/l	7 mf/l
Barium	DW/200.8	Barium	2 ug/l	2000 ug/l
Beryllium	DW/200.8	Beryllium	0.3 ug/l	4 ug/l
Boron	DW/200.8	Boron	5 ug/l	
Bromate	DW/300.1	Bromate	5 ug/l	10 ug/l
Cadmium	DW/200.8	Cadmium	1 ug/l	5 ug/l
Carbamates Phase II & V	DW/531.1	3-Hydroxycarbofuran	0.5 ug/l	
		Aldicarb	0.5 ug/l	
		Aldicarb sulfone	0.7 ug/l	
		Aldicarb sulfoxide	0.5 ug/l	
		Carbaryl	0.5 ug/l	
		Carbofuran	0.9 ug/l	40 ug/l
		Methomyl	0.5 ug/l	
		Oxamyl	1 ug/l	200 ug/l
Chloride	DW/300.0	Chloride	2 mg/l	250 mg/l
Chlorinated Acids Extended by 515.3	DW/515.3	2,4-D	0.1 ug/l	70 ug/l
		Dalapon	1 ug/l	200 ug/l
		Dicamba	0.1 ug/l	
		Dinoseb	0.1 ug/l	7 ug/l
		DCPA acid metabolites	0.5 ug/l	
		2,4,5-TP(Silvex)	0.1 ug/l	50 ug/l
		Picloram	0.1 ug/l	500 ug/l
		Pentachlorophenol	0.04 ug/l	1 ug/l
Chlorite	DW/300.0	Chlorite	10 ug/l	1000 ug/l
Chromium Total	DW/200.8	Chromium	2 ug/l	100 ug/l
Color (Apparent & True)	DW/2120B	Color (Apparent)	5 Pt/Co units	15
		Color (True)	5 Pt/Co units	15
Copper	DW/200.8	Copper	1 ug/l	1000 ug/l
Cyanide, Total	DW/335.4	Cyanide, Total	0.02 mg/l	0.2 mg/l
		2,3,7,8-Tetrachlorodibenzo-p-		
Dioxin	DW/1613	Dioxin	5 pg/l	30 pg/l
Diquat	DW/549.2	Diquat	0.4 ug/l	20 ug/l
EDB/DBCP	DW/504.1	1,2 Dibromo-3-chloropropane (CBCP)	0.01 ug/l	0.2 ug/l
		1,2-Dibromoethane (EDB)	0.01 ug/l	0.05 ug/l
Endothall	DW/548.1	Endothall	9 ug/l	100 ug/l
Fluoride	DW/380-75WE	Fluoride	0.1 mg/l	2 mg/l
Foaming Agents (MBAS)	DW/425.1	Foaming Agents(MBAS)	N/A	0.5 mg/l
			1	
Giardia/Cryptosporidium	DW/1623	Cryptosporidium	oocysts/100L	99% removal 99.9%
		Giardia	1 cysts/100L	removal/inactivation
Glyphosate	DW/547	Glyphosate	6 ug/L	700 ug/l
Gross Alpha & Beta	DW/7110 B	Gross Alpha	5 pCi/L	15 pCi/L
		Gross Beta	50 pCi/L	4 millerems/yr (beta particles and photon emitters)
Heterotrophic Plate (Pour Plate)	DW/9215 B	Heterotrophic Plate Count	1 cfu/ml	500 colonies/ml
Iron	DW/200.7	Iron	0.02 mg/L	0.3 mg/l
Lead	DW/200.8	Lead	1 ug/L	15 ug/l
Manganese	DW/200.8	Manganese	2 ug/L	50 ug/l
Mercury	DW/245.1	Mercury	0.1 ug/L	2 ug/l

Water Quality Analyses
LWS Hydrogeologic
Investigation
2004

Each of these analyses
will be performed for
each of the detailed
aquifer test sites

Analysis	Method	Analyte	Minimum Detection Limit	EPA Maximum Contaminant Limit
Nitrogen, Nitrate	DW/353.2	Nitrate	0.1 mg/L	10 mg/l
Nitrogen, Nitrate	DW/353.2	Nitrate	0.01 mg/L	1 mg/l
Perchlorate	DW/314.0	Perchlorate	4 ug/L	
Pesticides & Industrial Chemicals Extended	DW/525.2	2,4 - Dinitrotoluene	0.5 ug/L	
		4,4'-DDE	0.1 ug/L	
		Alachlor	0.1 ug/L	2 ug/l
		Atrazine	0.1 ug/L	3 ug/l
		Butachlor	0.1 ug/L	
		Terbacil	0.1 ug/L	
		Di-n-butylphthalate	2 ug/L	
		gamma-BHC (Lindane)	0.02 ug/L	0.2 ug/l
		Disulfoton	0.1 ug/L	
		Endrin	0.01 ug/L	0.2 ug/l
		Heptachlor epoxide	0.02 ug/L	0.2 ug/l
		Hexachlorocyclopentadiene	0.1 ug/L	50 ug/l
		Metolachlor	0.1 ug/L	
		Molinate	0.1 ug/L	
		Simazine	0.07 ug/L	4 ug/l
		2,6-Dinitrotoluene	0.5 ug/L	
		Acetochlor	0.1 ug/L	
		Aldrin	0.1 ug/L	
		Benzo[a]pyrene	0.02 ug/L	0.2 ug/l
		Butylbenzylphthalate	1 ug/L	
		Di(2-ethylhexyl)adipate	0.6 ug/L	400 ug/l
		Diazinon	0.1 ug/L	
		Dieldrin	0.1 ug/L	
		EPTC	0.1 ug/L	
		Heptachlor	0.04 ug/L	0.4 ug/l
		Hexachlorobenzene	0.1 ug/L	1 ug/l
		Methoxychlor	0.1 ug/L	40 ug/l
		Metribuzin	0.1 ug/L	
		Propachlor	0.1 ug/L	
		Di(2-ethylhexyl)phthalate	0.6 ug/L	6 ug/l
pH	DW/150.1	ph	ph units	
Phase II & V				
PCB/Toxaphene/Chlordane	DW/505	Aroclor 1016	0.08 ug/L	0.5 ug/l (PCBs)
		Aroclor 1232	0.5 ug/L	
		Aroclor 1248	0.1 ug/L	
		Aroclor 1260	0.2 ug/L	
		Aroclor 1221	2 ug/L	
		Aroclor 1242	0.3 ug/L	
		Aroclor 1254	0.1 ug/L	
		Toxaphene	1 ug/L	3 ug/l
		Chlordane	0.1 ug/L	2 ug/l
Phenols by 528	DW/528	2,4,6-Trichlorophenol	1 ug/L	
		2,4-Dinitrophenol	5 ug/L	
		2,4-Dichlorophenol	1 ug/L	
		2-Methylphenol	1 ug/L	
Phenylurea Compounds by 532	DW/532	Diuron	1 ug/L	
		Linuron	1 ug/L	
Radium-226 & 228	DW/7500	Radium-226	1 pCi/L	5 pCi/l (226 & 228 combined)
		Radium-228	1 pCi/L	
Selenium	DW/200.8	Selenium	2 ug/L	50 ug/l
Silver	DW/200.8	Silver	2 ug/L	100 ug/l
SOCs by 528	DW/528	Prometon	0.5 ug/L	
		Terbufos	0.5 ug/L	
		1,2 Diphenylhydrazine	0.5 ug/L	

Water Quality Analyses
LWS Hydrogeologic
Investigation
2004

Each of these analyses
will be performed for
each of the detailed
aquifer test sites

Analysis	Method	Analyte	Minimum Detection Limit	EPA Maximum Contaminant Limit
Sodium	DW/200.7	Fonofos	0.5 ug/L	
Solids, Dissolved	DW/160.1	Sodium	0.1 mg/L	
Sulfate	DW/300.0	Solids, Dissolved	10 mg/L	500 mg/l
Thallium	DW/200.8	Sulfate	5 mg/L	250 mg/l
Total Coliform (P/A - Colisure)	DW/200.8	Thallium	0.4 ug/L	2 ug/l
	DW/9223 B	Eschericia coli	N/A	
Total Culturable Virus Assary	DW/ICR Virus Assay	Total Coliform	N/A	5.0% per month 99.99% removal/inactivation
		Culturable Virus	1 MPN/100 L	
		Upper 95% Confidence Limit	1 MPN/100 L	
		Lower 95% Confidence Limit	1 MPN/100 L	
Turbidity	DW/180.1	Turbidity	1 NTU	1 or 5 NTU, treated
Uranium, Total	DW/7500-u B	Uranium	5 pCi/L	30 ug/l
Vanadium	DW/200.8	Vanadium	2 ug/L	
VOCs - Extended by 524.2	DW/524.2	1,1,1,2-Tetrachloroethane	0.5 ug/L	
		1,1,2,2-Tetrachloroethane	0.5 ug/L	
		1,1-Dichloroethane	0.5 ug/L	
		1,1-Dichloropropylene	0.5 ug/L	
		1,2,4-Trimethylbenzene	0.5 ug/L	
		1,2-Dichlorobenzene	0.5 ug/L	600 ug/l
		1,2-Dichloropropane	0.5 ug/L	5 ug/l
		1,3-Xylene	0.5 ug/L	
		1,4-Dichlorobenzene	0.5 ug/L	75 ug/l
		1,4-Xylene	0.5 ug/L	
		Benzene	0.5 ug/L	5 ug/l
		Bromochloromethane	0.5 ug/L	
		Bromomethane	0.5 ug/L	
		Chlorobenzene	0.5 ug/L	100 ug/l
		Chloroform	0.5 ug/L	
		cis-1,2-Dichloroethylene	0.5 ug/L	70 ug/l
		Dibromochloromethane	0.5 ug/L	
		Dichlorodifluoromethane	0.5 ug/L	
		Ethylbenzene	0.5 ug/L	700 ug/l
		Isopropylbenzene	0.5 ug/L	
		Naphthalene	0.5 ug/L	
		n-Propylbenzene	0.5 ug/L	
		Styrene	0.5 ug/L	100 ug/l
		Tetrachloroethylene	0.5 ug/L	5 ug/l
		trans-1,2-Dichloroethylene	0.5 ug/L	100 ug/l
		Trichloroethylene	0.5 ug/L	5 ug/l
		Vinyl chloride	0.2 ug/L	2 ug/l
				0.01% dosed at 20 mg/l (TT)
		Epichlorohydrin	1 ug/L	
		2-Butanone (MEK)	5 ug/L	
		1,1,1-Trichloroethane	0.5 ug/L	200 ug/l
		1,1,2-Trichloroethane	0.5 ug/L	5 ug/l
		1,1-Dichloroethylene	0.5 ug/L	7 ug/l
		1,2,4-Trichlorobenzene	0.5 ug/L	70 ug/l
		2-Chlorotoluene	0.5 ug/L	
		1,2-Dichloroethane	0.5 ug/L	5 ug/l
		1,3-Dichloropropane	0.5 ug/L	
		4-Chlorotoluene	0.5 ug/L	
		4-Isopropyltoluene	0.5 ug/L	
		2,2-Dichloropropane	0.5 ug/L	
		Bromobenzene	0.5 ug/L	
		Bromoform	0.5 ug/L	
		Carbon tetrachloride	0.5 ug/L	5 ug/l
		Chloroethane	0.5 ug/L	

Water Quality Analyses
LWS Hydrogeologic
Investigation
2004

Each of these analyses
will be performed for
each of the detailed
aquifer test sites

Analysis	Method	Analyte	Minimum Detection Limit	EPA Maximum Contaminant Limit
		Chloromethane	0.5 ug/L	
		cis-1,3-Dichloropropylene	0.5 ug/L	
		Dibromomethane	0.5 ug/L	
		Dichloromethane	0.5 ug/L	5 ug/l
		Hexachlorobutadiene	0.5 ug/L	
		Methyl-t-butyl ether	0.5 ug/L	
		n-Butylbenzene	0.5 ug/L	
		sec-Butylbenzene	0.5 ug/L	
		tert-Butylbenzene	0.5 ug/L	
		Toluene	0.5 ug/L	1000 ug/l
		trans-1,3-Dichloropropylene	0.5 ug/L	
		Trichlorofluoromethane	0.5 ug/L	
		Xylenes, Total	0.5 ug/L	10,000 ug/l
		Nitrobenzene	5 ug/L	
		Acetone	5 ug/L	
Zinc	DW/200.8	Zinc	5 ug/L	5000 mg/l

**Other Analyses to be
performed**

NDMA (N-Nitrosodimethylamine)				
Total Organic Carbon (TOC)				
UV254				
Ozone Demand and Decay	(to be tested by NovaChem)			
Dissolved Gases	(field measurement)			
Temperature	(field measurement)			
pH	(field measurement)			6.5 - 8.5
Specific Conductivity	(field measurement)			
Iron	(field measurement to verify EHL result)			
Manganese	(field measurement to verify EHL result)			
Total Hardness	(tested at LWS treatment plant)			
Alkalinity	(tested at LWS treatment plant)			
Radon				

INSTRUCTIONS TO BIDDERS

CITY OF LINCOLN, NEBRASKA

PURCHASING DIVISION

1. BIDDING PROCEDURE

- 1.1 Bidder shall submit two (2) complete sets of the bid documents and all supporting material. All appropriate blanks shall be completed. Any interlineation, alteration or erasure on the specification document shall be initialed by the signer of the bid. Bidders shall not change the proposal form nor make additional stipulations on the specification document. Any amplified or qualifying information shall be on the bidder's letterhead and firmly attached to the specification document.
- 1.2 Bid prices shall be submitted on the Proposal Form included in the bid document.
- 1.3 Bidders may submit a bid on an "all or none" or "lump sum" basis, but should also submit a quotation on an item-by-item basis. Bidding documents shall be clearly marked indicating the kind of proposal being submitted.
- 1.4 Each bid must be legibly printed in ink or by typewriter, include the full name, business address, and telephone number of the bidder; and be signed in ink by the bidder.
- 1.5 A bid by a firm or organization other than a corporation must include the name and address of each member.
- 1.6 A bid by a corporation must be signed in the name of such corporation by a duly authorized official thereof.
- 1.7 Any person signing a bid for a firm, corporation, or other organization must show evidence of his authority so to bind such firm, corporation, or organization.
- 1.8 Bids received after the time and date established for receiving bids will be rejected.

2. BIDDER'S SECURITY

- 2.1 Bid security, as a guarantee of good faith, in the form of a certified check, cashier's check, or bidder's bond, may be required to be submitted with this bid document, as indicated on the Proposal Form.
- 2.2 If alternate bids are submitted, only one bid security will be required, provided the bid security is based on the amount of the highest gross bid.
- 2.3 Such bid security will be returned to the unsuccessful bidders when the award of bid is made.
- 2.4 Bid security will be returned to the successful bidder(s) as follows:
 - 2.4.1 For single order bids with specified quantities: upon the delivery of all equipment or merchandise, and upon final acceptance by the City.
 - 2.4.2 For all other contracts: upon approval by the City of the executed contract and bonds.
- 2.5 City shall have the right to retain the bid security of bidders to whom an award is being considered until either:
 - 2.5.1 A contract has been executed and bonds have been furnished.
 - 2.5.2 The specified time has elapsed so that the bids may be withdrawn.
 - 2.5.3 All bids have been rejected.

- 2.6 Bid security will be forfeited to the City as full liquidated damages, but not as a penalty, for any of the following reasons, as pertains to this specification document:

- 2.6.1 If the bidder fails to deliver the equipment or merchandise in full compliance with the accepted proposal and specifications.
- 2.6.2 If the bidder fails or refuses to enter into a contract on forms provided by the City, and/or if the bidder fails to provide sufficient bonds or insurance within the time period as established in this specification document.

3. EQUAL OPPORTUNITY

- 3.1 Each bidder agrees that it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, ancestry, disability, age, or marital status. Bidder shall fully comply with the provisions of Chapter 11.08 of the Lincoln Municipal Code.
- 3.2 Successful bidder will be required to comply with the provisions of the City's Affirmative Action Policy (Contract Compliance, Sec. 1.16).
- 3.3 The Equal Opportunity Officer will determine compliance or non-compliance with the City's Affirmative Action Policy upon a complete and substantial review of successful bidder's equal opportunity policies, procedures and practices.

4. DATA PRIVACY

- 4.1 Bidder agrees to abide by all applicable State and Federal laws and regulations concerning the handling and disclosure of private and confidential information concerning individuals and corporations as to inventions, copyrights, patents and patent rights.
- 4.2 The bidder agrees to hold the City harmless from any claims resulting from the bidder's unlawful disclosure or use of private or confidential information.

5. BIDDER'S REPRESENTATION

- 5.1 Each bidder by signing and submitting a bid, represents that the bidder has read and understands the specification documents, and the bid has been made in accordance therewith.
- 5.2 Each bidder for services further represents that the bidder is familiar with the local conditions under which the work is to be done and has correlated the observations with the requirements of the bid documents.

6. INDEPENDENT PRICE DETERMINATION

- 6.1 By signing and submitting this bid, the bidder certifies that the prices in this bid have been arrived at independently, without consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor; unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder prior to bid opening directly or indirectly to any other bidder or to any competitor; no attempt has been made, or will be made, by the bidder to induce any person or firm to submit, or not to submit, a bid for the purpose of restricting competition.

7. CLARIFICATION OF SPECIFICATION DOCUMENTS

- 7.1 Bidders shall promptly notify the Purchasing Agent of any ambiguity, inconsistency or error which they may discover upon examination of the specification documents.
- 7.2 Bidders desiring clarification or interpretation of the specification documents shall make a written request which must reach the Purchasing Agent at least seven (7) calendar days prior to the date and time for receipt of bids.
- 7.3 Interpretations, corrections and changes made to the specification documents will be made by written addenda.
- 7.4 Oral interpretations or changes to the Specification Documents made in any other manner, will not be binding on the City; and bidders shall not rely upon such interpretations or changes.

8. ADDENDA

- 8.1 Addenda are written instruments issued by the City prior to the date for receipt of bids which modify or interpret the specification document by addition, deletion, clarification or correction.
- 8.2 Addenda will be mailed or delivered to all who are known by the City to have received a complete set of specification documents.
- 8.3 Copies of addenda will be made available for inspection at the office of the Purchasing Agent.
- 8.4 No addendum will be issued later than forty-eight (48) hours prior to the date and time for receipt of bids, except an addendum withdrawing the invitation to bid, or an addendum which includes postponement of the bid.
- 8.5 Bidders shall ascertain prior to submitting their bid that they have received all addenda issued, and they shall acknowledge receipt of addenda on the proposal form.

9. ANTI-LOBBYING PROVISION

- 9.1 During the period between the bid close date and the contract award, bidders, including their agents and representatives, shall not directly discuss or promote their bid with any member of the City Council or City Staff except in the course of City-sponsored inquiries, briefings, interviews, or presentations, unless requested by the City.

10. BRAND NAMES

- 10.1 Wherever in the specifications or proposal form brand names, manufacturer, trade name, or catalog numbers are specified, it is for the purpose of establishing a grade or quality of material only; and the term "or equal" is deemed to follow.
- 10.2 It is the bidder's responsibility to identify any alternate items offered in the bid, and prove to the satisfaction of the City that said item is equal to, or better than, the product specified.
- 10.3 Bids for alternate items shall be stated in the appropriate brand on the proposal form, or if the proposal form does not contain blanks for alternates, bidder MUST attach to the specification documents on Company letterhead a statement identifying the manufacturer and brand name of each proposed alternate, plus a complete description of the alternate items including illustrations, performance test data and any other information necessary for an evaluation. The bidder must indicate any variances by item number from the specification

document no matter how slight. Bidder must fully explain the variances from the specification document, since brochure information may not be sufficient.

- 10.4 If variations are not stated in the proposal, it will be assumed that the item being bid fully complies with the City's specifications.

11. DEMONSTRATIONS/SAMPLES

- 11.1 Bidders shall demonstrate the exact item(s) proposed within seven (7) calendar days from receipt of such request from the City.
- 11.2 Such demonstration can be at the City delivery location or a surrounding community.
- 11.3 If bidder does not have an item in the area, it will be at the bidder's expense to send appropriate City personnel to the nearest location to view and inspect proposed item(s).
- 11.4 If items are small and malleable, and the bidder is proposing an alternate product, the bidder MUST supply a sample of the exact item. Samples will be returned at bidder's expense after receipt by the City of acceptable goods. Bidders must indicate how samples are to be returned.

12. DELIVERY

- 12.1 Each bidder shall state on his proposal form the date upon which he can make delivery of all equipment or merchandise. Time required for delivery is hereby made an essential element of the bid.
- 12.2 The City reserves the right to cancel orders, or any part thereof, without obligation, if delivery is not made within the time(s) specified on the proposal form.
- 12.3 All bids shall be based upon **inside** delivery of the equipment or merchandise F.O.B. the City at the location specified by the City, with all transportation charges paid.

13. WARRANTIES, GUARANTEES AND MAINTENANCE

- 13.1 Copies of the following documents must accompany the bid proposal for all items being bid:
 - 13.1.1 Manufacturer's warranties and/or guarantees.
 - 13.1.2 Bidder's maintenance policies and associated costs.
- 13.2 As a minimum requirement of the City, the bidder will guarantee in writing that any defective components discovered within a one (1) year period after the date of acceptance shall be replaced at no expense to the City. Replacement parts of defective components shall be shipped at no cost to the City. Shipping costs for defective parts required to be returned to the bidder shall be paid by the bidder.
- 13.3 Bidder Warrants and represents to the City that all software/firmware/hardware/equipment/systems developed, distributed, installed or programmed by Bidder pursuant to this Specification and Agreement.
 - 13.3.1 That all date recognition and processing by the software/firmware/hardware/equipment/system will include the four-digit-year format and will correctly recognize and process the date of February 29, and any related data, during Leap years; and
 - 13.3.2 That all date sorting by the software /firmware/hardware/equipment/system that includes a "year category" shall be done based on the four-digit-year format. Upon being notified in writing by the City of the failure of any software/ firmware/

hardware /equipment /systems to comply with this Specification and Agreement, Contractor will, within 60 days and at no cost to the City, replace or correct the non-complying software/ firmware/ hardware/ equipment/ systems with software/firmware/ hardware/equipment/ systems that does comply with this Specification and Agreement.

- 13.3.3 No Disclaimers: The warranties and representations set forth in this section 13.3 shall not be subject to any disclaimer or exclusion of warranties or to any limitations of Licensor's liability under this Specification and Agreement.

14. ACCEPTANCE OF MATERIAL

- 14.1 All components used in the manufacture or construction of materials, supplies and equipment, and all finished materials, shall be new, the latest make/model, of the best quality, and the highest grade workmanship.
- 14.2 Material delivered under this proposal shall remain the property of the bidder until:
- 14.2.1 A physical inspection and actual usage of this material is made and found to be acceptable to the City; and
- 14.2.2 Material is determined to be in full compliance with the specifications and accepted proposal.
- 14.3 In the event the delivered material is found to be defective or does not conform to the specification documents and accepted proposal, then the City reserves the right to cancel the order upon written notice to the bidder and return materials to the bidder at bidder's expense.
- 14.4 Successful bidder shall be required to furnish title to the material, free and clear of all liens and encumbrances, issued in the name of the City of Lincoln, Nebraska, as required by the specification documents or purchase orders.
- 14.5 Selling dealer's advertising decals, stickers or other signs shall not be affixed to equipment. Vehicle mud flaps shall be installed blank side out with no advertisements. Manufacturer's standard production forgings, stampings, nameplates and logos are acceptable.

15. BID EVALUATION AND AWARD

- 15.1 The signed bid proposal shall be considered an offer on the part of the bidder. Such offer shall be deemed accepted upon issuance by the City of purchase orders, contract award notifications, or other contract documents appropriate to the work.
- 15.2 No bid shall be modified or withdrawn for a period of ninety (90) calendar days after the time and date established for receiving bids, and each bidder so agrees in submitting the bid.
- 15.3 In case of a discrepancy between the unit prices and their extensions, the unit prices shall govern.
- 15.4 The bid will be awarded to the lowest responsive, responsible bidder whose proposal will be most advantageous to the City, and as the City deems will best serve their requirements.
- 15.5 The City reserves the right to accept or reject any or all bids; to request rebids; to award bids item-by-item, by groups, or "lump sum"; to waive irregularities and technicalities in bids; such as shall best serve the requirements and interests of the City.

16. INDEMNIFICATION

- 16.1 The bidder shall indemnify and hold harmless the City, its members, its officers and employees from and against all claims, damages, losses, and expenses, including, but not limited to attorney's fees arising out of or resulting from the performance of the contract, provided that any such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property other than goods, materials and equipment furnished under this contract) including the loss or use resulting therefrom; is caused in whole or part by any negligent act or omission of the bidder, any subcontractor, or anyone directly or indirectly employed by any one of them or anyone for whose acts made by any of them may be liable, regardless of whether or not it is caused by a party indemnified hereunder.
- 16.2 In any and all claims against the City or any of its members, officers or employees by an employee of the bidder, any subcontractor, anyone directly or indirectly employed by any of them or by anyone for whose acts made by any of them may be liable, the indemnification obligation under paragraph 16.1 shall not be limited in any way by any limitation of the amount or type of damages, compensation or benefits payable by or for the bidder or any subcontractor under worker's or workmen's compensation acts, disability benefit acts or other employee benefit acts.

17. TERMS OF PAYMENT

- 17.1 Unless other specification provisions state otherwise, payment in full will be made by the City within thirty (30) calendar days after all labor has been performed and all equipment or other merchandise has been delivered, and all such labor and equipment and other materials have met all contract specifications.

18. LAWS

- 18.1 The Laws of the State of Nebraska shall govern the rights, obligations, and remedies of the Parties under this proposal and any agreement reached as a result of this process.

CONTRACT DOCUMENTS

CITY OF LINCOLN

NEBRASKA

CITY OF LINCOLN, NEBRASKA

CONTRACT AGREEMENT

THIS CONTRACT, made and entered into this ____ day of _____, 2004, by and between _____ hereinafter called contractor, and the City of Lincoln, Nebraska, a municipal corporation, hereinafter called the City.

WITNESS, that:

WHEREAS, the City has caused to be prepared, in accordance with law, Specifications, Plans, and other Contract Documents for the Work herein described, and has approved and adopted said documents and has caused to be published an advertisement for and in connection with said Work, to-wit:

_____ and,

WHEREAS, the Contractor, in response to such advertisement, has submitted to the City, in the manner and at the time specified, a sealed Proposal in accordance with the terms of said advertisement; and,

WHEREAS, the City, in the manner prescribed by law has publicly opened, read aloud, examined, and canvassed the Proposals submitted in response to such advertisement, and as a result of such canvass has determined and declared the Contractor to be the lowest responsible bidder for the said Work for the sum or sums named in the Contractor's Proposal, a copy thereof being attached to and made a part of this Contract;

EQUAL EMPLOYMENT OPPORTUNITY: In connection with the carrying out of this project, the contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, ancestry, disability, age or marital status. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, national origin, ancestry, disability, age or marital status. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other compensation; and selection for training, including apprenticeship.

NOW, THEREFORE, in consideration of the sums to be paid to the Contractor and the agreements herein contained, the Contractor and the City have agreed and hereby agree as follows:

The Contractor agrees to (a) furnish all tools, equipment, supplies, superintendence, transportation, and other construction accessories, services, and facilities; (b) furnish all materials, supplies, and equipment specified to be incorporated into and form a permanent part of the complete work; (c) provide and perform all necessary labor in a substantial and workmanlike manner and in accordance with the provisions of the Contract Documents; and (d) execute construct, and compete all Work included in and covered by the City's award of this Contract to the Contractor, such award being based on the acceptance by the City of the Contractor's Proposal, or part thereof, as follows:

The City agrees to pay to the Contractor for the performance of the Work embraced in this Contract, the Contractor agrees to accept as full compensation therefor, the following sums and prices for all Work covered by and included in the Contract award and designated above, payment thereof to be made in the manner provided by the City:

\$

CONTRACT AGREEMENT

The Work included in this Contract shall begin as soon as possible from date of executed contract. The completion shall be _____.

GUARANTEE:

A performance bond in the full amount of the contract shall be required for all construction contracts. This bond shall remain in effect during the guarantee period as stated in the specifications.. Once the project is completed, the contractor may submit a maintenance bond in place of the performance bond.

The Contract Documents comprise the Contract, and consist of the following:

1. The Instructions to Bidders
2. The Accepted Proposal
3. The Contract Agreements
4. The Specifications
- *5. The City of Lincoln Standard Specifications for Municipal Construction
 - a. General Conditions
 - b. General Specifications
 - c. Construction & Materials Specifications
- ** 6. The Plans (including the Schedule of Approximate Quantities)
7. The Construction Bonds
8. The Special Provisions

* If project includes paving, water, sewer, sidewalk, lighting or traffic signal work, the City of Lincoln Standard Specifications for Municipal Construction will apply, which are on file in the office of the City Clerk. Copies may be obtained at the Office of the City Engineer.

** The following is an enumeration of the Plans, which are entitled:

CONTRACT AGREEMENT

These Contract Agreements, together with the other Contract Documents herein above mentioned, form this Contract, and the are as fully a part of the Contract as if hereto attached or herein repeated.

The Contractor and the City hereby agree that all the terms and conditions of this Contract shall by these presents be binding upon themselves, and their heirs, administrators, executors, legal and personal representatives, successors, and assigns.

IN WITNESS WHEREOF, the Contractor and the City do hereby execute this contract.

EXECUTION BY THE CITY OF LINCOLN, NEBRASKA

ATTEST:

CITY OF LINCOLN, NEBRASKA

City Clerk

Mayor

Approved by Executive or No. _____
dated _____

EXECUTION BY CONTRACTOR

IF A CORPORATION:

Name of Corporation

(Address)

ATTEST:

Secretary (SEAL)

By: _____
Duly Authorized Official

Legal Title of Official

IF OTHER TYPE OF ORGANIZATION:

Name of Organization

Type of Organization

(Address)

By: _____
Member

By: _____
Member

IF AN INDIVIDUAL:

Name

Address

Signature

A. GENERAL INFORMATION

There are two types of construction bonds that are required by statutes for public work in many jurisdictions and are widely used for other projects as well.

Construction Performance Bond

Construction Payment Bond

The Construction Performance Bond is an instrument that is used to assure the availability of funds to complete the construction.

The Construction Payment Bond is an instrument that is used to assure the availability of sufficient funds to pay for labor, materials and equipment used in the construction. For public work the Construction Payment Bond provides rights of recovery for workers and suppliers similar to their rights under the mechanics lien laws applying to private work.

The objective underlying the re-writing of construction bond forms was to make them more understandable to provide guidance to users. The intention was to define the rights and responsibilities of the parties, without changing the traditional rights and responsibilities that have been decided by the courts. The new bond forms provide helpful guidance regarding time periods for various notices and actions and clarify the extent of available remedies.

The concept of pre-default meeting has been incorporated into the Construction Performance Bond. All of the participants favored early and informal resolution of the problems that may precipitate a default, but some Surety companies were reluctant to participate in pre-default settings absent specific authorization in the bond form.

The responsibilities of the Owner and the options available to the Surety when a default occurs are set forth in the Construction Performance Bond. Procedures for making a claim under the Construction Payment Bond are set forth in the form.

EJCDC recommends the use of two separate bonds rather than a combined form. Normally the amount of each bond is 100 percent of the contract amount. The bonds have different purposes and are separate and distinct obligations of the Surety. The Surety Association reports that the usual practice is to charge a single premium for both bonds and there is no reduction in premium for using a combined form or for issuing one bond without the other.

B. COMPLETING THE FORMS

Bonds have important legal consequences; consultation with an attorney and a bond specialist is encouraged with respect to federal, state and local laws applicable to bonds and with respect to completing or modifying the bond forms.

Both bond forms have a similar format and the information to be filled in is ordinarily the same on both bonds. If modification is necessary, the modifications may be different.

The bond forms are prepared for execution by the Contractor and the Surety. Evidence of authority to bind the Surety is usually provided in the form of a power of attorney designating the agent who is authorized to sign on behalf of the Surety. The power of attorney should be filed with the signed bonds.

Each bond must be executed separately since they cover separate and distinct obligations.

Preferably the bond date should be the same date as the contract, but in no case should the bond date precede the date of the contract.

CONSTRUCTION PERFORMANCE BOND

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

SURETY (Name and Principal
Place of Business):

Owner (Name and Address):

City of Lincoln

555 South 10th St.

Lincoln, NE 68508

CONSTRUCTION CONTRACT

Date:

Amount: \$

Description (Name and Location):

BOND

Date (Not earlier than Construction Contract Date)

Amount: \$

Modifications to this Bond Form:

CONTRACTOR AS PRINCIPAL

Company: (Corp. Seal)

SURETY

Company: (Corp. Seal)

Signature: _____

Name and Title:

Signature: _____

Name and Title:

CONTRACTOR AS PRINCIPAL

Company: (Corp. Seal)

SURETY

Company: (Corp. Seal)

Signature: _____

Name and Title:

Signature: _____

Name and Title:

EJCDC NO. 1910-28a (1984 Edition)

Prepared through the joint efforts of The Surety Assoc. of America. Engineers' Joint Contract Documents Committee. The Associated General Contractors of America, and the American Institute of Architects.

1. The Contractor and the Surety, jointly and severally, bind themselves their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except to participate in conferences as provided in Subparagraph 3.1.
3. If there is no Owner Default, the Surety's obligation under this Bond shall arise after:
 - 3.1 The Owner has notified the Contractor and the Surety at its address described in Paragraph 10 below, that the Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with the Contractor and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Construction Contract. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default and
 - 3.2 The Owner has declared a Contractor Default and formally terminated the Contractor's right to complete the contract. Such Contractor Default shall not be declared earlier than twenty days after the Contractor and the Surety have received notice as provided in Subparagraph 3.1; and
 - 3.3 The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Construction Contract or to a contractor selected to perform the Construction Contract in accordance with the terms of the contract with the Owner.
4. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:
 - 4.1 Arrange for the Contractor, with consent of the Owner, to perform and complete the Construction Contract, or
 - 4.2 Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors; or
 - 4.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and the contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by the Owner resulting from the Contractor's default, or
 - 4.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:
 1. After investigation, determine the amount for which it may be liable to the Owner and as soon as practicable after the amount is determined tender payment therefor to the Owner; or
 2. Deny liability in whole or in part and notify the Owner citing reasons therefor.
5. If the Surety does not proceed as provided in Paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Subparagraph 4.4 and the Owner refuses payment tendered or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.
6. After the Owner has terminated the Contractor's right to complete the Construction Contract, and if the Surety elects to act under Subparagraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. To the limit of the amount of this Bond, but subject to commitment by the Owner of the Balance of the Contract Price to mitigation of costs and damages on the Construction Contract, the Surety is obligated without duplication for:
 - 6.1 The responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
 - 6.2 Additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 4; and
 - 6.3 Liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.
7. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, or successors.
8. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related sub-contracts, purchase orders and other obligations.
9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
10. Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page.
11. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
12. Definitions.
 - 12.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.
 - 12.2 Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.
 - 12.3 Contractor Default: Failure of the Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract.
 - 12.4 Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

CONSTRUCTION PAYMENT BOND

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

SURETY (Name and Principal Place
Of Business):

Owner (Name and Address):

City of Lincoln
555 South 10th St.
Lincoln, NE 68508

CONSTRUCTION CONTRACT

Date:

Amount: \$

Description (Name and Location):

BOND

Date (Not earlier than Construction Contract Date):

Amount: \$

Modifications to this Bond Form:

CONTRACTOR AS PRINCIPAL

Company: (Corp. Seal)

SURETY

Company: (Corp. Seal)

Signature: _____

Name and Title:

Signature: _____

Name and Title:

CONTRACTOR AS PRINCIPAL

Company: (Corp. Seal)

SURETY

Company: (Corp. Seal)

Signature: _____

Name and Title:

Signature: _____

Name and Title:

EJCDC NO. 1910-28B (1984 Edition)

Prepared through the joint efforts of The Surety Assoc. of America. Engineers' Joint Contract Documents Committee. The Associated General Contractors of America, and the American Institute of Architects.

1. The Contractor and the Surety, jointly and severally, bind themselves their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference.
 2. With respect to the Owner, this obligation shall be null and void if the Contractor:
 - 2.1 Promptly makes payment, directly or indirectly, for all sums due Claimants, and
 - 2.2 Defends, indemnifies and holds harmless the Owner from all claims, demands, liens or suits by any person or entity who furnished labor, materials or equipment for use in the performance of the Construction Contract, provided the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 12) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety, and provided there is no Owner Default.
 3. With respect to Claimants, this obligation shall be null and void if the Contractor promptly makes payment, directly or indirectly, for all sums due.
 4. The Surety shall have no obligation to Claimants under this Bond until:
 - 4.1 Claimants who do not have a direct contract with the Contractor have given notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof to the Owner, stating that a claim is being made under this Bond and with substantial accuracy the amount of the claim.
 - 4.2 Claimants who do not have a direct contract with the Contractor:
 1. Have furnished written notice to the Contractor and sent a copy, or notice thereof, to the Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed, and
 2. Have either received a rejection in whole or in part from the Contractor, or not received within 30 days of furnishing the above notice any communication from the Contractor by which the Contractor has indicated the claim will be paid directly or indirectly; and
 3. Not having been paid within the above 30 days, have sent a written notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the Contractor.
 5. If a notice required by Paragraph 4 is given by the Owner to the Contractor or to the Surety, that is sufficient compliance.
 6. When the Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:
 - 6.1 Send an answer to the Claimant, with a copy to the Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.
 - 6.2 Pay or arrange for payment of any undisputed amounts.
 7. The Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
 8. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any Construction Performance Bond.
- By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and the Surety under this Bond, subject to the Owner's priority to the funds for the completion of the work.
9. The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.
 10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.
 11. No suite or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the work or part of the work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by Subparagraph 4.1 or Clause 4.1 (iii), or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
 12. Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page. Actual receipt of notice by Surety, the Owner or the Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.
 13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted here from and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is, that this Bond shall be construed as a statutory bond and not as a common law bond.
 14. Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.
 15. DEFINITIONS
 - 15.1 Claimant: An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials, or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.
 - 15.2 Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.
 - 15.3 Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

INSURANCE CLAUSE TO BE USED FOR ALL CITY CONTRACTS

The Contractor shall indemnify and save harmless the City of Lincoln, Nebraska from and against all losses, claims, damages, and expenses, including attorney's fees, arising out of or resulting from the performance of the contract that results in bodily injury, sickness, disease, death, or to injury to or destruction of tangible property, including the loss of use resulting therefrom and is caused in whole or in part by the Contractor, any subcontractor, any directly or indirectly employed by any of them or anyone for whose acts any of them may be liable. This section will not require the Contractor to indemnify or hold harmless the City of Lincoln for any losses, claims, damages, and expenses arising out of or resulting from the negligence of the City of Lincoln, Nebraska.

Contractor shall not commence work under this contract until he has obtained all insurance required under this Section and such insurance has been approved by the City Attorney for the City of Lincoln, nor shall the Contractor allow any sub-contractor to commence work on his subcontract until all similar insurance required of the sub-contractor has been so obtained and approved.

A. Worker's Compensation Insurance and Employer's Liability Insurance

The Contractor shall take out and maintain during the life of this contract the applicable statutory Worker's Compensation Insurance with an insurance company authorized to write such insurance in this state covering all his employees, and in the case of any work sublet, the Contractor shall require the subcontractor similarly to provide statutory Worker's Compensation Insurance for the latter's employees. The Contractor shall take out and maintain during the life of this contract, Employer's Liability Insurance with a limit of \$100,000 in an insurance company authorized to write such insurance in all states where the Contractor will have employees located in the performance of this contract, and the Contractor shall require each of his subcontractors similarly to maintain common law liability insurance on his employees.

State	Statutory
Applicable Federal	Statutory
Employer's Liability	\$100,000

B. General Liability Insurance

1. The Contractor shall maintain during the life of this contract, General Liability Insurance, naming and protecting him and the City of Lincoln, its officials, employees and volunteers as insured, against claims for damages resulting from (a) bodily injury, including wrongful death, (b) personal injury liability, and (c) property damage which may arise from operations under this contract whether such operations be by himself or by any subcontractor or anyone directly or indirectly employed by either of them. The minimum acceptable limits of liability to be provided by such insurance shall be as follows:

A. Bodily Injury/Property Damage	\$1,000,000 each Occurrence
	\$2,000,000 Aggregate
B. Personal Injury Damage	\$1,000,000 each Occurrence
C. Contractual Liability	\$1,000,000 each Occurrence
D. Products Liability & Completed Operations	\$1,000,000 each Occurrence

2. The General Liability Insurance required by the preceding paragraph shall include the following extensions of coverage:
 - (a) The coverage shall be provided under a Commercial General Liability form or similar thereto.
 - (b) X.C.U. Coverage - if the contract requires any work procedures involving blasting, excavating, tunneling or other underground work, the liability coverage shall include Standard Blasting or Explosion Coverage, Standard Collapse Coverage, and Standard Underground Coverage commonly referred to as XCU Property Damage Liability.
 - (c) The property damage coverage shall include a Broad Form Property Damage Endorsement or similar thereto.
 - (d) Contractual Liability coverage shall be included.
 - (e) Products Liability and/or Completed Operations coverage shall be included.
 - (f) Personal Injury Liability coverage shall be included.

C. Automobile Liability Insurance

The Contractor shall take out and maintain during the life of the contract such Automobile Liability Insurance as shall protect him against claims for damages resulting from bodily injury, including wrongful death, and property damage which may arise from the operations of any owned, hired, or non-owned automobiles used by or for him in any capacity in connection with the carrying out of this contract. The minimum acceptable limits of liability to be provided by such Automobile Liability Insurance shall be as follows:

Bodily Injury and Property Damage \$1,000,000 Combined Single Limit

D. Builder's Risk Insurance (For Building Construction Contracts Only)

Unless otherwise specified where buildings are to be constructed under this contract, the Contractor shall provide and maintain fire, extended coverage, vandalism, and malicious mischief insurance, covering such building in an amount equal to one-hundred percent (100%) of the contract amount (minimum), as specified herein.

Losses, if any, shall be made payable to the City of Lincoln and Contractor as their interest may appear. A Certificate of Insurance evidencing such insurance coverage shall be filed with the City of Lincoln by the time work on the building begins and such insurance shall be subjected to the approval of the City Attorney.

E. Minimum Scope of Insurance

All Liability Insurance policies shall be written on an "occurrence" basis only. All insurance coverage are to be placed with insurers authorized to do business in the State of Nebraska and must be placed with an insurer that has an A.M. Best's Rating of no less than A:VII unless specific approval has been granted by the City of Lincoln.

F. Certificate of Insurance

All certificates of insurance shall be filed with the City of Lincoln on the standard ACCORD CERTIFICATE OF INSURANCE form showing the specific limits of insurance coverage required by the preceding Sections A, B, C, D, and showing the City of Lincoln as a named additional insured. Such certificate shall specifically state that insurance policies are to be endorsed to require the insurer to provide the City of Lincoln thirty days, notice of cancellation, non-renewal or any material reduction of insurance coverage.

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City of
Lincoln,
Nebraska

10/29/92

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GENERAL TERMS

I. DEFINITIONS

- A. Addendum (Addenda) shall mean the formal written instructions the City issued to prospective Bidders prior to the closing date for receipt of bids. Such instructions change or clarify the original plans or specifications, i.e., additions, deletions, modifications, or explanations.
- B. Advertisement shall mean the announcement the City made as required by law, stating the time and place for receiving bids for the Work.
- C. Architect shall mean the designated architect or engineer the City employed or contracted to provide design and other professional services related to the project. Architect shall include the Architect or the Architect's authorized representative.
- D. Bid shall mean the properly signed and guaranteed written offer of the Bidder to perform the Work. Bid shall include Proposals or other formal written offers to perform the Work.
- E. Bidder shall mean any individual, entity, firm, partnership, or corporation formally submitting a proposal to perform the Work or to supply materials for the Work. Bidder shall include any of the same acting through an authorized agent or representative.
- F. Change Order shall mean a written instrument the Architect or Contract Administrator issues and the Mayor and the Contractor approve to state the City and Contractor's agreement for a change in the Work. All Change Orders shall specify the method of payment, if any. All Change Orders shall specify adjustments in the Contract Sum or Contract Time, if any.
- G. City shall mean the City of Lincoln, Nebraska, and shall include the City's authorized representative.
- H. Claim shall include a demand or assertion by the City or Contractor seeking an adjustment to or interpretation of Contract terms, payment, time or other matters related to the Contract. The party making the Claim shall substantiate any such Claim.
- I. Construction Change Directive shall mean a written instrument the Architect or Contract Administrator issues and the City approves for a change in the Work within the scope of the Contract. Such changes shall include additions, deletions or other revisions. Such directive shall state a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both. Construction Change Directives shall not invalidate the Contract in any event.
- J. Contract Documents shall include the Contract, Conditions of the Contract (General, Supplementary and other conditions), Drawings, Specifications, addenda issued prior to execution of the Contract, other documents listed in the Contract and modifications or other agreements required to complete the work issued after execution of the Contract. Unless specifically excluded in the Contract, Contract Documents shall also include the bidding requirements, Advertisement, Instructions to Bidders, sample forms, Contractor's Bid and Addenda. See also: Subparagraphs XIV(D); and XXIV(A).
- K. Contract shall mean the entire and integrated agreement between the City and Contractor. The parties may amend or modify the Contract only by Modification.
- L. Contract Time shall mean the time the Contract Documents allow for Substantial Completion of the Work. Contract Time shall include any changes the City authorized by Modification.
- M. Contractor shall mean the person or entity identified as such in the Contract. Contractor includes the Contractor or the Contractor's authorized representative. The contractor is always considered as an independent Contractor.
- N. Day shall mean calendar day including Sundays and Holidays. (See Subparagraph II(G), Time)
- O. Drawings shall include any graphic or pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, including: plans, elevations, sections, details, schedules and diagrams related to the Work.
- P. Liquidated Damages shall mean the amount prescribed in the Contract Documents that the Contractor is to pay to the City for each Day after the contract completion date until the Substantial Completion Date. Liquidated Damages are actual damages the Contractor owes the City. The Contractor agrees such damages are not a penalty.
- Q. May shall be permissive.
- R. Mayor shall mean the Mayor of the City of Lincoln, Nebraska.
- S. Modification shall include any (1) written amendment to the Contract that both the City and Contractor have signed, (2) Change Order, (3) Construction Change Directive or (4) authorized written order the Architect issued for a minor change in the Work.
- T. Month shall mean a calendar month.

- U. Product Data shall include illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information the Contractor furnishes to illustrate materials or equipment for the Work.
- V. Project Manual shall mean the document assembled for the Work that may include the bidding requirements, sample forms, Conditions of the Contract and Specifications.
- W. Project shall mean the total construction related to the Work provided by this Contract. The Project may include construction by the City or by separate contractors.
- X. Samples shall include physical examples that represent materials, equipment or workmanship and establish standards for the Work.
- Y. Shall shall be mandatory.
- Z. Shop Drawings shall include drawings, diagrams, schedules and other data the Contractor or any Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor specially prepared to illustrate some portion of the Work.
- AA. Specifications shall mean any written requirement for materials, equipment, construction systems, standards or workmanship for the Work, including performance of related services.
- BB. Sub-subcontractor shall mean a person or entity a Subcontractor hires or contracts to perform a portion of the Work at the site. Sub-subcontractor includes any Sub-subcontractor or an authorized representative of the Sub-subcontractor.
- CC. Subcontractor shall mean a person or entity the Contractor hires or contracts to perform a portion of the Work at the site. Subcontractor includes any Subcontractor or an authorized representative of the Subcontractor. Subcontractor shall not include any separate contractor the City hires or contracts or any subcontractors of such separate contractor.
- DD. Substantial Completion Date shall mean the date the City certifies as such in accordance with Paragraph LIII, Substantial Completion.
- EE. Substantial Completion shall mean the stage when the City determines (according to the Contract Documents) that the Work or a designated portion thereof is sufficiently complete, and when the Contractor has secured all required occupancy permits, if any, so the City can occupy or use the Work for its intended use.

- FF. Work Commencement Date shall mean the date established as such in the Contract. The Contractor shall not postpone such date by failure to act or by permitting or allowing persons or entities under the Contractor's responsibility to postpone such date.
- GG. Work shall include the construction and services the Contract Documents require, whether completed or partially completed, and all other labor, materials, equipment and services necessary to fulfill the Contractor's obligations. Work may constitute the whole or a part of the Project.

II. CONSTRUCTION AND INTENT

- A. The General Conditions may refer to conditions that are not applicable to the Work. Such Conditions shall have no meaning.
- B. Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the work among Subcontractors or in establishing the extent of Work to be performed by any trade.
- C. Words and phrases that have well-known technical or construction industry meanings shall have such recognized meanings unless the context requires otherwise.
- D. Words used in the singular shall include the plural, and the plural the singular.
- E. Words used in the masculine gender shall include the feminine and the feminine the masculine.
- F. These rules of construction shall not apply to any part of the Contract that expressly excludes such construction, or where the subject matter or context of such provision requires otherwise.
- G. When the Contract Documents provide for a time determination by stating a certain number of days, the parties shall determine such time as follows:
 1. Exclude the first day and include the last day.
 2. Exclude Sunday if it would otherwise be the last day.
 3. Exclude the following Holidays as observed by the City if such Holiday would otherwise be the last day: Labor Day, Veteran's Day, Thanksgiving Day, Christmas Day, New Year's Day, President's Day, Memorial Day or Independence Day.
- H. Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an." Such omission in one statement as opposed to inclusion in another shall not affect the interpretation of either statement.

- I. The parties shall interpret the General Conditions exclusively according to the terms of the Contract Documents. The parties do not intend any comparison to any other document.

III. OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS

- A. The Drawings, Specifications and other documents the Architect prepares for this Project are and shall remain the property of the City and the Architect. Both the City and the Architect retain all common law, statutory and other reserved rights, including any copyright.
- B. Upon completion of the Work, the Contractor shall return or account for all copies of any Drawings, Specifications and other documents the Architect prepares (except the Contractor's record set) to the Architect.
- C. The City and the Architect have provided the Drawings, Specifications and other documents the Architect prepares for this Project (and copies thereof furnished to the Contractor) solely for use in this Project. Any other use requires the specific written consent of the City and Architect. The Contractor, Subcontractor, Sub-subcontractor, and material or equipment suppliers, shall not use such documents on other projects, including additions to this Project outside the scope of the Work.
- D. The City and Architect hereby grant to the Contractor, Subcontractors, Sub-subcontractors and material or equipment suppliers a limited license to use and reproduce applicable portions of the Drawings, Specifications and other documents the Architect prepares for this Project. Subcontractors, Sub-subcontractors and material or equipment suppliers shall take such license limited strictly to documents appropriate for use in their own work. Such license shall include authority to submit or distribute licensed documents to meet official regulatory requirements or for other official purposes for the Project.

PRECONDITIONS AND ASSURANCES

IV. GENERAL PRECONDITIONS AND ASSURANCES

- A. By submitting a bid, the Contractor represents that the Contractor has:

1. Inspected and otherwise acquired site specific information of and concerning:
 - a. The conditions under which the work is to be performed;
 - b. the site of the work;
 - c. the structure of the ground;
 - d. any obstacles that may be encountered; and
 - e. all other relevant matters concerning the work;
 2. Compared and evaluated such personal observations with the requirements of the Contract Documents;
 3. Determined such methods and practices necessary as to underground structures, underground utilities (both public and private), underground soil and rock formations, ground water, and other obstacles that may be encountered;
 4. Made and prepared its Bid using only materials and equipment which comply fully with the plans and specifications, acknowledging that any failure to do so shall make the Contractor responsible for furnishing materials and equipment which fully conform without additional compensation;
 5. Examined the complete specifications and plans, including all related documents, all of which may contain provisions applicable not only to the Contractor, but also to the Subcontractors;
 6. Made such examinations and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the Contract;
 7. Verified the correctness of any quantities listed in any Contract Documents; and
 8. Received all the information the Contractor needs concerning the conditions of the Project Site.
- B. The Contractor shall not present a claim for adjustment to the Contract Sum or Contract Time for any condition the Contractor knew or reasonably should have known from information available to the contractor under Subparagraph IV(A). The Contractor shall not present a claim for surface or subsurface conditions encountered.
- C. The Contractor shall not present a claim for adjustment to the Contract Sum or Contract Time for any dispute related to: estimates of quantities in the Contract, or any misunderstanding of the nature or amount of work to be done.
- D. The Contractor shall employ such methods and means in the carrying out the work as will not cause any interruption or interference with any other contractor or subcontractor.
- E. Based upon the contract documents, the Contractor agrees and acknowledges that:
1. The Contract documents are adequate and sufficient to provide for completion of the Work. This acknowledgment extends to work that by inference or necessity may be required or useful for the completion of the work in accordance with all applicable laws, codes and professional

standards, even though such work may not be expressly provided for in the Contract Documents;

2. The contract sum is reasonable compensation for all the Work, including all unforeseen, foreseen and foreseeable risks, hazards and difficulties in connection with the Work;
3. The Contract Time is adequate for the performance of the Work; and
4. The Work shall not result in any lateral or vertical movement of any structure.

- F. The Contractor shall sign all necessary Contract Documents and any related documents necessary to complete the Work.

V. UNIT PRICES.

When the Contract Documents provide for portions or quantities of Work on a unit price basis, such estimated quantities in the Contract are approximate and are to be used only as a basis for estimating the probable cost of the work and for comparing the proposals offered for the work. The Contractor agrees that, during progress of the work, the City may find it advisable to increase or decrease the quantities as the City may deem necessary or desirable. The actual amount of work to be done and material to be furnished on a Unit Price basis may differ from the estimated quantities. The City shall make payment for Unit Price Work based on the actual number of units installed on the completed work.

VI. STATED CONDITIONS.

Where the City indicates conditions in the Contract Documents, such conditions shall be considered only for information and as indicative of conditions as observed at the time and place indicated. The City shall not be held responsible for any variance in conditions encountered at the time of actual work.

CITY

VII. INFORMATION AND SERVICES REQUIRED OF THE CITY

- A. The City shall not be responsible for furnishing surveys (unless required for the execution of the work and requested by the Contractor in writing) or for providing other information as to the physical characteristics, legal limitations, or utility locations for the project site. The City shall furnish or cause to be furnished to the Contractor a

legal description of the project site. Such legal description shall not be a part of the Contract Documents. The City may provide existing test borings for the site. If the Contractor uses any such information, the Contractor is solely responsible for such use. The City does not assume any responsibility whatsoever as to the sufficiency or accuracy of such borings, or any logs or results from such borings including any related interpretations. Further, the City provides absolutely no warranty or guarantee, express or implied, that the conditions indicated by such borings, investigations, logs, or information are representative of those existing throughout the project site, or any part thereof, or that changes or unforeseen developments may not occur.

- B. Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, (For example see: Paragraph XVIII.) the City shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.
- C. The City shall furnish information or services under the City's control with reasonable promptness to avoid delay in orderly progress of the Work.
- D. The above responsibilities supplement other duties and responsibilities of the City provided elsewhere, specifically including Construction by City or by Separate Contractors, Payments and Completion, and Insurance and Bonds.

VIII. CITY'S RIGHT TO STOP THE WORK

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents (as required by correction of work provisions), or persistently fails to carry out Work in accordance with the Contract Documents, the City may order the Contractor to stop the Work, or any portion thereof, until the Contractor eliminates the cause for such order. The Mayor shall sign such stop order stating such cause in writing. The right of the City to stop the Work shall not give rise to a duty for the City to exercise this right for the Contractor or any other person or entity.

IX. CITY'S RIGHT TO CARRY OUT THE WORK

- A. If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents, the City may (without prejudice to other remedies) correct such deficiencies. The City may do so only when the Contractor fails to commence corrections within a seven-day period after receipt of written notice from the City, or when the Contractor fails to continue correction of such deficiencies with diligence and promptness.

- B. The City or the Architect shall issue an appropriate Change Order deducting the cost of correcting such deficiencies. Such Change Order shall include compensation for the Architect's additional services and expenses made necessary by such default, neglect or failure. If payments then or thereafter due to the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the City.

X. STORAGE OF MATERIALS

- A. The Contract shall store all materials under the general supervision and direction of the Architect.
- B. The Contractor shall store all Materials to preserve their quality and fitness for the Work and to facilitate prompt inspection.
- C. The Architect may, when needed, order the Contractor to store Materials under cover or on wooden platforms or as the Architect otherwise reasonably requires to protect the same from damage.
- D. The Contractor shall not use any materials in the Work that may contain Asbestos as defined under the Nebraska Asbestos Control Act, Neb. Rev. Stat §§71-6301 et. seq. without the express written approval of the City.

XI. ALTERATIONS AND SUBSTITUTIONS.

- A. The City or the Architect shall have the right to alter and modify the plans and specifications, thus making specific changes in the Work. If such changes diminish the amount of Work, the Contractor shall not file any claim for anticipated profit from such loss of Work. If such changes increase the amount of work, such increase shall be made by Modification to the Contract.
- B. Whenever the drawings or specifications identify a material, article, or piece of equipment by brand name or catalog number, such identification shall define performance, quality level, or other salient requirements. The Architect may consider other products of equal performance, capacity, quality and function upon the Contractor's written substitution request. Otherwise, the Contractor shall use the identified goods, unless the Architect approves such request for substitution in writing. Upon any substitution of lesser priced goods, the Architect shall prepare a Modification deducting any resulting price differential from the Contract Sum. Otherwise, the Contractor shall make any incidental changes or extra component parts required to accommodate the substitute without a change in the

Contract Sum or Contract Time. The Contractor warrants that approved substitutes will not effect major changes in the function or general design.

XII. DEFECTIVE MATERIALS.

- A. The City shall consider all materials not conforming to the specifications as defective. Unless remedied, the City shall reject all defective material, whether in place or not. The Contractor shall remove any such defective material from the work site at the Contractor's own cost.
- B. The Architect may approve materials the Contractor has remedied by reconditioning or correction to satisfactorily meet the Specifications. The Architect may make such approval in writing upon the written request of the Contractor. The Contractor shall not use any remedied materials without such written approval.

XIII. CITY SUPPLIED MATERIALS.

- A. The City shall furnish City supplied Material or equipment according to the Contract Documents in good condition and ready for installation. The Contractor shall pick up such material or equipment at a location the City or the Architect shall designate.
- B. The Contractor shall inspect and measure all City supplied material or equipment before the same is loaded onto the Contractor's vehicle for transportation to the work site. The Contractor shall complete and sign a Certificate of Acceptance for such materials and immediately submit the same to the Architect or his authorized representative. The Contractor shall note all defects in materials and measure on such Certificate.
- C. The Contractor shall return any excess city supplied materials to the point of receipt. The City shall thereupon issue the Contractor a written receipt verifying condition and measures such excess material. The City may refuse any materials damaged by the Contractor. The Contractor shall pay for the cost of any such damaged materials.

CONTRACTOR

XIV. REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR

- A. The Contractor hereby specifically acknowledges and declares that the Contract Documents are complete and sufficient to have enabled the Contractor to determine the cost of the work. The Contractor hereby specifically acknowledges and declares that

the Drawings, Specifications and all addenda are sufficient to enable the Contractor to construct the Work in accordance with applicable laws, statutes, building codes and regulations, and otherwise to fulfill all its obligations to complete the Work. In addition, if the Contractor performs any construction activity with knowledge that it involves a recognized error, inconsistency or omission in the Contract Documents, the Contractor shall assume full responsibility for such performance and shall bear the attributable costs for correction. See Subparagraph XVIII(C) for discrepancies related to Building Codes and regulations.

- B. The Contractor shall take field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to the Contractor with the Contract Documents before commencing activities. The Contractor shall immediately report any errors, inconsistencies or omissions discovered to the Architect in writing.
- C. The Contractor shall perform the Work in accordance with the Contract Documents and submittals approved pursuant to Paragraph XXIV.
- D. The Architect or City may furnish the Contractor additional instructions and detailed drawings as necessary to carry out the Work. Such additional drawings are a part of the Contract Documents

XV. SUPERVISION AND CONSTRUCTION PROCEDURES

- A. The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and shall have control over construction means, methods, techniques, sequences, coordination, and procedures for all portions of the Work.
- B. The Contractor shall be responsible to the City for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons performing portions of the Work under a contract with Contractor.
- C. The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Architect's administration of the Contract, or by tests, inspections or approvals persons other than the Contractor perform.

- D. The Contractor shall be responsible for inspection of portions of Work already performed under this Contract to determine that such portions are in proper condition to receive subsequent Work.
- E. At the earliest possible time after the commencement of the Work on the Project Site, the Contractor shall:
 - 1. Contract (at Contractor's expense) a state licensed land surveyor to verify and establish all property corners and benchmarks;
 - 2. Locate the Project on the Project Site;
 - 3. Establish any necessary reference marks and axes from which the Work accurately can progress;
 - 4. Furnish the Architect evidence of the verification required above; and
 - 5. Provide written Notice to the City of any errors discovered from such verification.
- F. If the Work requires any public authority to inspect or approve the same, the Contractor shall cause the timely performance of any such inspection or approval. No such inspection performed or failed to be performed shall waive the Contractor's obligations under the Contract Documents. No such inspection or approval (even if the City is the inspecting or approving authority) shall act as an approval or acceptance of the Work or portions thereof by the City.
- G. The Contractor acknowledges that it is the Contractor's responsibility to hire all personnel for the proper and diligent prosecution of the Work. The Contractor shall use its best efforts to maintain labor peace for the duration of the Work. In the event of a labor dispute, the Contractor shall not be entitled to any increase in the Contract Sum.

XVI. LABOR AND MATERIALS

- A. Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for: labor, materials, equipment, tools, construction equipment and machinery; water, heat, utilities, transportation, and other facilities; and any other item or services necessary for proper execution and completion of the Work. Such items and services shall be so provided regardless of whether temporary or permanent or whether incorporated or to be incorporated in the Work.
- B. The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Contract. The Contractor shall not employ or permit employment of unfit persons or persons not skilled in tasks assigned to them.

XVII. WARRANTY

- A. The Contractor warrants to the City that:
 - 1. Materials and equipment furnished under the Contract shall be of good quality and new unless otherwise required or permitted by the Contract Documents;
 - 2. The Work shall be free from defects not inherent in the quality required or permitted;
 - 3. The Work shall be performed in accordance with accepted and established practices and procedures recognized in the construction trade in general and the Architect or design professionals in general; and
 - 4. The Work shall conform with the requirements of the Contract Documents.
- B. The City may consider Work not conforming to these warranty requirements as defective Work.
- C. The Contractor's warranty excludes: Remedy for damage caused by abuse by the City; Modifications not executed by the Contractor; improper or insufficient maintenance by the City; improper operation by the City; or normal wear and tear under normal usage.

XVIII. PERMITS, FEES AND NOTICES

- A. Unless specifically exempted in the Contract Documents, the Contractor shall secure and pay for the building permit and other legally required permits and governmental fees, licenses and inspections necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract. The Contractor shall procure all Certificates of inspection, use, occupancy, permits and licenses, pay all charges and fees and give all notices necessary and incidental to the due and lawful prosecution of the Work. Certificates of inspection, use, or occupancy shall be delivered to the City upon completion of the Work. Such delivery shall be made in a timely manner to allow the City to occupy the Project in accordance with the approved Work schedule. The Contractor shall not request or claim any adjustment to the Contract Sum for the costs of procuring any such inspections or approvals.
- B. The Contractor shall comply with and give notices required by laws, ordinances, rules, regulations, and lawful orders of public authorities bearing on performance of the Work and shall likewise require all subcontractors and all their employees to do the same.

- C. The Contractor shall review the Contract Documents to determine any discrepancy between building codes and regulations the Contractor has knowledge of or should reasonably be able to determine. The Contractor shall immediately notify the City and the Architect in writing of any such discrepancies. The Contractor shall not violate any zoning, setback or other location requirements, laws or codes and ordinances, or of any recorded covenants the Contractor has knowledge. If the Contractor observes that portions of the Contract documents are at variance with applicable laws, statutes, ordinances, building codes, rules or regulations, the Contractor shall promptly notify the City and the Architect in writing, and any resulting changes necessary shall be accomplished by appropriate Modification. See Subparagraph XIV(A) for discrepancies related to error, inconsistency or omission in the Contract Documents.
- D. If the Contractor performs Work knowing it to be contrary to laws, statutes, ordinances, building codes, and rules and regulations without such notice to the Architect and City, the Contractor shall assume full responsibility for such Work. In addition, the Contractor shall bear the attributable costs of correction.

XIX. PRE-CONSTRUCTION AND PROGRESS CONFERENCES.

- A. Within forty-eight (48) hours of receipt of notification from the Architect, the Contractor or his authorized representative shall, at no cost to the City, appear at a location designated by the Architect for the purpose of discussing pre-construction or construction scheduling, traffic control procedure or methods, and project progress during construction.
- B. At such conferences the Contractor or his authorized representative shall provide, at no cost to the City, any data sheets, construction schedules, or other information the Architect may reasonably request.

XX. ALLOWANCES

- A. The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. The Contractor shall supply items covered by allowances in such amounts and by such persons or entities as the City may direct. The Contractor may make reasonable objection to employing such persons or entities. Upon such reasonable objection the City shall appoint or direct alternate persons or entities as needed.
- B. Unless otherwise provided in the Contract Documents:
 - 1. The City shall select Materials and equipment under any allowance to avoid delay in the Work;

2. To determine Allowances, the Contractor shall include the Contractor's cost for materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
3. The Contract Sum (not the related allowances) shall include the Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses related to such allowances.
4. Whenever the costs in Clause XX(B)(2); above are more than or less than allowances, the City and Contractor shall adjust the Contract Sum accordingly by Change Order.

XI. SUPERINTENDENT

The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during the Work. The superintendent shall represent the Contractor. Any Communication to the superintendent or that the superintendent receives shall bind the Contractor. The City or Architect shall confirm important communications to the Contractor in writing. The City or Architect shall similarly confirm any specific communication upon the written request of the Contractor.

XXII. CONTRACTOR'S CONSTRUCTION SCHEDULES

- A. The Contractor, promptly after being awarded the Contract, shall prepare and submit for the City's and Architect's information a Contractor's construction schedule for the Work. The schedule shall not exceed time limits current under the Contract Documents. The Contractor shall revise the same at appropriate intervals as required by the conditions of the work and Project. The Contractor shall relate such schedules to the entire Project for the expeditious and practicable execution of the Work.
- B. The Contractor shall prepare and keep current, for the Architect's approval, a schedule of submittals. The Contractor shall coordinate such schedule with the Contractor's construction schedule. The Contractor shall submit the same to the Architect allowing the Architect reasonable time to review the submittals.
- C. The Contractor shall conform to the most recent schedules.

XXIII. DOCUMENTS AND SAMPLES AT THE SITE

The Contractor shall maintain at the site for the City one record copy of the Drawings; Specifications; Addenda; Change Orders; Modifications; approved Shop Drawings; Product Data, Samples and similar required submittals in good order and marked currently to record changes and selections made during construction. During the Work, The Contractor shall permit the City and Architect access to such record copy. The Contractor shall deliver the same to the City upon completion of the Work.

XXIV. SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

- A. Contract Documents shall not include Shop Drawings, Product Data, Samples and similar submittals. Such submittals demonstrate or illustrate the Contractor's proposal to conform to the information given and the design concept expressed in the Contract Documents for related portions of the Work.
- B. The Contractor shall review, approve, and submit to the Architect any Shop Drawings, Product Data, Samples, and similar submittals the Contract Documents require. The Contractor shall do so with reasonable promptness to prevent any delay in the Work or in the activities of the City or of separate contractors. The Architect may return (without any further action) any Submittals that the Contract Documents do not require.
- C. The Contractor shall obtain the Architects approval before beginning any portion of the Work requiring submittal and review of Shop Drawings, Product Data, Samples or similar submittals. The Contractor shall perform such Work only in accordance with approved submittals.
- D. By approving and submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, and has checked and coordinated the information contained within such submittals with the requirements of the work and the Contract Documents.
- E. The Architect's approval of such submittals shall not excuse the Contractor for deviations from any requirements of the Contract Documents. The obtain specific written approval for such deviations only when the Contractor has given written notice to the Architect with the original submittal and the Architect and the City have given written approval to the specific deviation. The Architect's approval of such submittals shall not relieve the Contractor from responsibility for any errors or omissions therein.

- F. The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples or similar submittals, to revisions other than revisions the Architect requested on previous submittals.
- G. The Contractor may identify Informational submittals in the Contract Documents that the Architect is not expected to respond to or approve.
- H. When the Contract Documents require professional certification of performance criteria of materials, systems or equipment, the City and the Architect shall be entitled to reasonably rely upon the accuracy and completeness of such calculations and certifications.

XXV. USE OF SITE

- A. The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents. The Contractor shall not unreasonably encumber the site with materials or equipment.
- B. The Contractor shall protect the site and the Work from loss by theft or otherwise. Until completion and final acceptance of the work, the Contractor shall assume all risks for repair and replacement for damage to the site and the Work, whether caused by lightning, fire, wind, water, theft, vandalism or other causes.

XXVI. CONTRACTOR'S USE OF UTILITIES.

- A. The Contractor shall arrange for all temporary service connections for various utilities and shall pay the various utilities for such temporary services.
- B. Prior to the use of any City water from a fire hydrant, the Contractor shall take out the necessary permit for a hydrant meter and valve from the Lincoln Water System.
- C. The Contractor shall pay the permit fees that are established by the Lincoln Water System for the installation or moving of hydrant meters and valves.
- D. The Contractor shall not operate the hydrant, but may use the exterior valve to control the flow of water. The Contractor shall be liable for any damage to the meter and valve.

XXVII. CUTTING AND PATCHING

- A. The Contractor shall be responsible for cutting, fitting or patching required to complete the Work or to make parts of the Work fit together properly.

- B. The Contractor shall not damage or endanger any portion of the Work or fully or partially completed construction of the City or separate contractors by cutting, patching or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter such construction by the City or a separate contractor except with written consent of the City and of such separate contractor. Such consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold from the City or a separate contractor the Contractor's consent to cutting or otherwise altering the Work.

XXVIII. CLEANING UP

- A. The Contractor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work the Contractor shall remove from and about the Project, all waste materials, rubbish, tools, construction equipment, machinery and surplus materials.
- B. If the Contractor fails to clean up as provided in the Contract Documents, the City may do so and charge the cost thereof to the Contractor.

XXIX. ACCESS TO WORK

The Contractor shall provide the City and Architect access to the Work in preparation and progress wherever located.

XXX. ROYALTIES AND PATENTS

- A. It is mutually understood and agreed that, without exception, the Contract Sum includes all royalties and costs arising from patents, trademarks, and copyrights in any way involved in the Work.
- B. Whenever the Contractor uses or the Contract Documents require any design device, material, or process covered by letters, patent, or copyright, the Contractor shall provide for the right for such use by legal agreement with the patentee or owner thereof. Regardless of any agreement or lack thereof, the Contractor and the surety in all cases shall indemnify and hold harmless the City from any and all claims for infringement by the use of any such patented design, device, material, process, trademark or copyright, in connection with the Work. Likewise, the Contractor and the surety in all such cases shall indemnify the City for any costs, expenses, and damages that the City may be obligated to pay, for any such claims. The indemnification provided herein shall apply at any time during the Work and shall continue after the completion of the work indefinitely.

- C. The Contractor shall pay all royalties and license fees.
- D. The Contractor shall defend suits or Claims for infringement of patent rights.
- E. The Contractor shall promptly notify the Architect of any required design, process, or product the Contractor has reason to believe is an infringement of a patent, copyright or other intangible right. The Contractor shall assume full responsibility for and shall bear the attributable costs for any possible patent, copyright or other alleged infringement of intangible rights.

XXXI. INDEMNIFICATION

- A. To the fullest extent permitted by law, the Contractor shall indemnify and Hold Harmless the City, Architect, and agents and employees of any of them from and against Claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, that results in any Claim for damage whatsoever, including without limitation, any bodily injury, sickness, disease, death, or any injury to or destruction of tangible or intangible property, including any loss of use resulting therefrom that is caused in whole or in part by Contractor or anyone directly or indirectly employed by Contractor, or anyone for whose acts any of them may be liable, regardless of whether or not such Claim, damage, loss or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Paragraph XXXI. This section shall not require Contractor to indemnify or Hold Harmless the City for any losses, Claims, damages, and expenses arising out of or resulting from the sole negligence of the City.
- B. In addition, the City shall not be responsible nor be held liable, for any damage consequent upon the use, misuse or failure of any equipment used by Contractor or anyone directly or indirectly employed by Contractor. The Contractor's acceptance or use of any such equipment shall mean that Contractor accepts full responsibility for any loss or damage to the equipment while the equipment was used or under the control of Contractor, or anyone directly or indirectly employed by Contractor. In addition to paying for any such damage to the equipment itself, the Contractor agrees to exonerate, indemnify, and hold harmless the City from and against any and all Claims for any damage whatsoever resulting from the use, misuse or failure of such equipment. Such indemnification applies

regardless of whether such damage or loss is occasioned by any employee or property of Contractor, the City or other persons. Such indemnification shall not be qualified or reduced in any way because the subject equipment may be furnished, rented or loaned to Contractor by the City.

- C. In Claims by any person or entity indemnified under this Paragraph XXXI or by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this Paragraph XXXI shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' or worker's compensation acts, disability benefit acts or other employee benefit acts.

XXXII. PROTECTION OF WORK AND PROPERTY

- A. The Contractor shall protect and support all water, sewer, gas and other pipes and structures; telephones, telegraph or electric power lines; all railroad tracks, pavement, building walls, fences, utilities, or other properties, public or private, which may be damaged during the execution of this Work. During all operations under the Contract, the Contractor shall carefully protect all trees, shrubbery, sod, plantings, etc., not designated to be removed as part of the work of the Contract.
- B. In the event of damage or injury to such property or improvements, the Contractor shall promptly repair the same to the satisfaction of the City. The Contractor shall pay the attributable costs for any such repairs. See Also: Contractor's obligations and assumption of risk in Subparagraph XXV.
- C. The City may provide information for existing sub-surface structures in the vicinity of the work in the Contract Documents. The City does not, however, guarantee the completeness or accuracy of this information. Any delay or extra cost to the Contractor due to encountering structures differing from those provided shall not constitute a Claim for extra payment.

XXXIII. TRAFFIC CONTROL

- A. Where required for any activities related to the Work, all Traffic Control Devices and Signs shall conform to the City's traffic control regulations and requirements.
- B. All costs associated with traffic control shall be paid for by the Contractor as a part of the Contract Sum.

XXXIV. FAIR EMPLOYMENT PRACTICES

The Contractor and the Subcontractors shall not discriminate against any employee (or applicant for employment) with

respect to compensation, terms, advancement potential, conditions, or privileges of employment, because of such person's race, color, religion, sex, disability, national origin, ancestry, age, or marital status pursuant to the requirements of Lincoln Municipal code Chapter 11.08 and Section 48-1122, Nebraska Reissue Revised Statutes of 1943.

XXXV. FAIR LABOR STANDARDS

The Contractor and the Subcontractors shall maintain Fair Labor Standards in the performance of the Contract, as required by Chapter 73, Nebraska Reissue Revised Statutes of 1943.

ARCHITECT

XXXVI. ARCHITECT'S ADMINISTRATION OF THE CONTRACT

- A. The Architect shall provide administration of the Contract as described in the Contract Documents, and may act as the City's representative, with the City's concurrence, (1) during construction, (2) until final payment is due and (3) from time to time during the correction period described in Paragraph LXIV. The Architect shall have authority to act on behalf of the City only to the extent provided in the Contract Documents and allowed by law.
- B. The City and the Architect shall at all times have the right of access to the site. The City requires the Architect to visit the site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the completed Work and to determine if the Work is being performed in a manner that, when completed, will be in accordance with the Contract Documents. On the basis of on-site observations, the City requires the Architect to keep the City informed of progress of the Work, and guard the City against defects and deficiencies in the Work. The Contractor shall cooperate and accommodate the Architect pursuant to the site visitation and reporting requirements above. The Architect's responsibilities shall not lessen or excuse any obligations or duties of the Contractor.
- C. The City and Contractor shall attempt to communicate to each other through the Architect. The City and Contractor shall communicate with the Architect's consultants through the Architect. The City shall communicate with

Subcontractors and material suppliers through the Contractor. The Contractor shall communicate with separate contractors through the City.

- D. The Contractor shall permit the Architect to review and certify any amounts Claimed due upon observation and evaluation of the Contractor's Applications for Payment. The Architect shall issue certificates for Payment to the City based on such review.
- E. The Architect may reject Work that does not conform to the Contract Documents. Whenever the Architect considers it necessary or advisable for implementation of the intent of the Contract Documents, the Architect may require additional inspection or testing of the Work in accordance with Subparagraphs LXII(A-B), whether or not such Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons performing portions of the Work other than the City.
- F. The Architect shall review and approve or take other appropriate action upon the contractor's submittals such as Shop Drawings, Product Data and Samples. The Architect shall review the same for conformance with information given and the design concept expressed in the Contract Documents. The Architect's review shall not excuse the Contractor from determining the accuracy and completeness of details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems. The Architect's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Paragraphs XIV, XVII, and XXIV. The Architect's review shall not constitute approval of safety precautions or any construction means, methods, techniques, sequences or procedures (unless otherwise specifically stated by the Architect.) The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.
- G. The Contractor shall permit the Architect to conduct inspections to determine the date or dates of Substantial Completion and the date of final completion.
- H. If the City and Architect agree, the Architect may provide one or more project representatives to assist in carrying out the Architect's responsibilities at the site. The duties, responsibilities and limitations of authority of such project representatives shall be as set forth in an exhibit to be incorporated in the Contract Documents.

CLAIMS & DISPUTES

XXXVII. CLAIMS AND DISPUTES

- A. The Contractor and City shall make any Claim against the other party in writing giving a description thereof to the Architect and the other party. The claimant may make a Claim only within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the Claimant first recognizes the condition giving rise to the Claim, whichever is later.
- B. Pending final resolution of a Claim (unless the Parties otherwise agree in writing) the Contractor shall proceed diligently with performance of the Contract and the City shall continue to make payments in accordance with the Contract Documents.
- C. When the City makes final payment and the Contractor accepts the same, the City and the Contractor thereby waive all claims except those arising from:
 - 1. Unsettled liens, Claims, security interests or encumbrances arising out of the Contract;
 - 2. Failure of the Work to comply with the requirements of the Contract Documents; or
 - 3. Terms of special warranties required by the Contract Documents.
- D. If the either party encounters or discovers (1) subsurface or otherwise concealed physical conditions which differ materially from the Contract Documents or (2) unknown physical conditions of an unusual nature, which differ materially from those ordinarily found to exist and generally recognized as inherently encountered in the Work, then the observing party shall give prompt notice of the condition to the Architect and the other party by giving a description thereof. The observing party shall give such notice promptly before conditions are disturbed and in no event later than 21 days after first observance of the same.
- E. If the Contractor wishes to make Claim for an increase in the Contract Sum, the Contractor shall provide written notice as provided herein before proceeding to execute the Work. notice is not required for Claims relating to an emergency endangering life or property arising under Paragraph LVIII, Emergencies. The Contractor may make claims for additional cost for reasons including but not limited to (1) a written opinion from the Architect, (2) an order by the City to stop the Work where the Contractor was not at fault, (3) a written order for a minor change in the Work issued by the Architect, (4) failure of payment

by the City, (5) termination of the Contract by the City, (6) City's suspension or (7) other reasonable grounds.

- F. If the Contractor wishes to make Claim for an increase in the Contract Time, the Contractor shall give written notice as provided herein. The Contractor's Claim shall include an estimate of cost and delay on the Work, if any. In the case of a continuing delay only one Claim is necessary.
- G. If the Contractor bases a Claim for additional time on adverse weather, the Contractor shall substantiate such Claim with data substantiating that: (1) the adverse weather was abnormal for the period of time, (2) the Contractor could not have reasonably anticipated the adverse weather, and (3) the weather had an adverse effect on the scheduled construction.
- H. If either party to the Contract suffers injury or damage to person or property because of an act or omission of the other party, of any of the other party's employees or agents, or of others for whose acts such party is legally liable, the claimant shall give written notice of such injury or damage (whether or not insured) to the other party within 21 days after first observance. The notice shall provide sufficient detail to enable the other party to investigate the matter. If the claimant asserts additional cost or time related to such injury or damage, the claimant shall file a separate claim for each.

XXXVIII. RESOLUTION OF CLAIMS AND DISPUTES

- A. The Architect shall review Claims and take one or more of the following preliminary actions within ten days after receipt of a Claim: (1) request additional supporting data from the Claimant, (2) submit a schedule to the parties indicating when the Architect expects to take action, (3) reject the Claim in whole or in part, stating reasons for rejection, (4) recommend approval of the Claim by the other party or (5) suggest a compromise. The Architect may also, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim.
- B. If the City and Contractor resolve the Claim, the Architect shall prepare a Change Order or other documentation accordingly.
- C. If the City and Contractor do not resolve the Claim after consideration of the foregoing, either party may seek a judicial resolution of any Claim. Any Claim against the City shall comply with the provisions of Neb. Rev. Stat. 15-840 et seq. and other applicable laws relating to claims against the City.

SUBCONTRACTORS

XXXIX. AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

- A. The Contractor shall notify the Architect of the names and addresses of the Subcontractors (including those who are to furnish materials or equipment fabricated to a special design) the Contractor proposes to use on the contract. The Contractor shall submit such notification before beginning any subcontracted work.
- B. Nothing contained in the Contract Documents shall create any contractual relationship between any Subcontractor and the City. The Contractor agrees to be fully responsible to the City for the acts or omissions of Subcontractors and of anyone employed directly or indirectly by the Contractor or Subcontractors. This contract obligation shall be in addition to the liability imposed by law upon the Contractor.
- C. The Contractor agrees to bind every Subcontractor (and every Subcontractor of a Subcontractor) by the terms of the General Conditions and the Special Provisions of the contract, plans, and specifications as far as applicable, including insurance requirements, unless specifically noted to the contrary in a subcontract the City has approved in writing.
- D. The Contractor shall not contract with a proposed Subcontractor to whom the City or Architect has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection.
- E. If the City or Architect has reasonable objection to a Subcontractor proposed by the contractor, the Contractor shall propose another to whom the City or Architect has no reasonable objection. The Contract Sum shall be increased or decreased by the difference in cost occasioned by such change and an appropriate Change Order shall be issued. However, no increase in the Contract Sum shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.
- F. The Contractor shall not change a Subcontractor previously selected if the City or Architect makes reasonable objection to such change.
- G. Failure of the City or Architect to reply within ten days after a subcontractor's submittal for approval shall mean the City has no reasonable objection.
- H. By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities that the Contractor, by these Documents, assumes toward the City or Architect. Each subcontract agreement shall preserve and protect the rights of the City and Architect under the Contract Documents for each Subcontractor's Work so that subcontracting thereof shall not prejudice such rights. Such agreements shall allow to the Subcontractor (unless specifically provided otherwise in the subcontract agreement) the benefit of all rights, remedies and redress against the Contractor that the Contractor, by the Contract Documents, has against the City. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor shall be bound. Upon written request of the Subcontractor, the Contractor shall identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors shall similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.
- I. Notwithstanding any provision of Subparagraph XXXIX(A), the Contractor shall require a written Subcontract between the Contractor and such Subcontractor (or the Subcontractor and its Sub-subcontractor at any tier) for any part of the Work a Subcontractor or Sub-subcontractor performs. The Contractor shall use or require the use of a form of subcontract satisfactory to the City in all respects for such written agreements. Each such contract shall contain provisions that require the Subcontractor to:
 1. Perform such Work in accordance with the Contract Documents;
 2. Waive all rights the contracting parties may have against one another or that the Subcontractor may have against the City for damages caused by fire or other perils covered by insurance required in contract documents.
 3. Carry and maintain insurance coverage in accordance with the Contract Documents, and to file Certificates of such coverage with the Contractor;
 4. Submit to Contractor or Subcontractor, as the case may be, applications for payment (on a City approved form) together with clearly defined invoices and billings supporting all such applications under each subcontract;
 5. Report, so far as is practicable, unit prices and any other feasible formula for use in determination of the costs of changes in the Work;
 6. Furnish to the Contractor in a timely fashion all information necessary for the preparation and submission of the reports required in the Contract Documents;

7. Continue to perform under its subcontract in the event the Contract is terminated and the City shall take assignment of said contract and request such subcontractor to continue such performance;
8. Remove all debris created by its activities; and
9. Follow Fair Employment Practices and Fair Labor Standards.

XL. CONTINGENT ASSIGNMENT OF SUBCONTRACTS

- A. The Contractor shall automatically assign to the City each subcontract agreement the City accepts by notifying the Subcontractor in writing upon the City's termination of the Contract for cause pursuant to Paragraph LXXIII. Such assignment shall be subject to the prior rights of the surety, if any.
- B. If the Work has been suspended for more than 30 days, the City may equitably adjust compensation for any Subcontractor assigned hereunder.

CHANGES IN THE WORK

XLI. CHANGES

- A. The City or Contractor may accomplish Changes in the Work after execution of the Contract (without invalidating the Contract) by Change Order, Construction Change Directive or order for a minor change in the Work (subject to the limitations stated in Changes In The Work (XLI - XLII) and elsewhere in the Contract Documents.)
- B. The parties shall perform Changes in the Work as provided in the Contract Documents, and the Contractor shall proceed promptly so as to avoid any delay in the Work, unless otherwise provided in such change in the Work.

XLII. CONSTRUCTION CHANGE DIRECTIVES

- A. The City may use A Construction Change Directive in the absence of total agreement on the terms of a Change Order.
- B. If the Construction Change Directive provides for an adjustment to the Contract Sum, the City shall calculate such adjustment based on one of the following methods:
 1. lump sum properly itemized and supported by sufficient substantiating data to permit City evaluation;

2. unit prices stated in the Contract Documents or subsequently agreed upon;
3. cost (to be determined in a manner the parties agree upon) plus a mutually acceptable fixed or percentage fee; or
4. as provided in Subparagraph XLII(E).

- C. Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Architect of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.
- D. If the Contractor signs such Construction Change Directive, such signature shall conclusively establish the agreement of the Contractor therewith, including adjustment in Contract Sum and Contract Time or the method for determining the same. The City shall consider such agreement as immediately effective and shall record such agreement as a Change Order.
- E. If the Contractor does not respond within 10 days or disagrees with the method for adjustment in the Contract Sum, the City shall determine the method and the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change. In case of an adjustment that increases the Contract Sum, the expenditures attributable to the change shall include a reasonable allowance for overhead and profit. In such case, and under Clause XLII(B)(3), the Contractor shall keep and present (in such form as the City may prescribe) an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, the City shall pay costs limited only to the following costs directly attributable to the change:
 1. Labor, including social security, old age and unemployment Insurance, fringe benefits required by agreement or custom, and workers' or workmen's compensation Insurance;
 2. Materials, supplies and equipment, including cost of transportation, whether incorporated or consumed;
 3. Rents for machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
 4. Premiums for all Bonds and Insurance, permit fees, and sales, use or similar taxes related to the Work; and
 5. Additional supervision and field office personnel.
- F. Pending final determination of costs, the Contractor may include amounts not in dispute in Applications for Payment. For a deletion or change that results in a net decrease in the Contract Sum, the City and Contractor shall use the actual net cost to determine such decrease. When both additions and credits covering related Work or substitutions are involved in a change, the City and Contractor shall figure an allowance for overhead and profit on the basis of net increase, if any, with respect to that change.

- G. When the City and Contractor agree with the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately. Such agreement shall be recorded by preparation and execution of an appropriate Change Order.

TIME

XLIII. PROGRESS AND COMPLETION

- A. Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Contract the Contractor confirms that the Contract Time is a reasonable period for performing the Work.
- B. The Contractor shall not knowingly commence operations on the site or elsewhere prior to the effective date of Insurance required by Paragraphs LIX, LX, LXI, Insurance and Bonds. The effective date of such Insurance shall not change The Work Commencement Date in any event. The Contractor shall notify the City in writing not less than five days before commencing the Work unless the City establishes a different date of commencement by a notice to proceed.
- C. The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

XLIV. DELAYS AND EXTENSIONS OF TIME

- A. If the Contractor is delayed by an act or neglect of the City or Architect, or of an employee of either, or of a separate contractor employed by the City, or by delay the City has authorized in writing, or by other causes that the City determines may justify delay, then the City and Contractor shall extend the Contract Time accordingly by Change Order.
- B. The Contractor shall make such claims in accordance with applicable provisions of Paragraph XXXVII.

XLV. LIQUIDATED DAMAGES

- A. If the Contractor fails to complete the Work prior to the completion date (allowing for any approved extensions of time), the Contractor shall pay Liquidated Damages for each day that the work remains incomplete. The City shall deduct the amount of Liquidated Damages due from the money due the Contractor prior to final payment. If the

remaining amount due the Contractor is less than the total amount of Liquidated Damages, the Contractor shall pay the difference within 10 days. If the Contractor fails to pay such difference, the City shall have the right to recover the difference from the Contractor or his Surety.

- B. Unless specifically amended or modified by special provision, the daily amount of the Liquidated Damages shall be as follows:
1. Contract Sum up to and including \$100,000:
\$100/day
 2. Contract Sum more than \$100,000 up to and including \$500,000:
\$200/day
 3. Contract Sum more than \$500,000 up to and including \$1,000,000
\$300/day.
 4. Contract Sum more than \$1,000,000
\$400 /day.
- C. The Liquidated Damages provided herein are not considered punitive. The Contractor agrees that such damages are predetermined and reasonable amounts to compensate for the detriment to the public and to defray expenses incurred by the City due to the delay in the completion of the project.

PAYMENTS AND COMPLETION

XLVI. CONTRACT SUM

- A. The Contract Sum stated in the Contract (including any adjustments the City authorizes) is the total amount the City shall pay to the Contractor for the Work.
- B. Notwithstanding any other provision of the Contract Documents, the City may withhold any payment to the Contractor hereunder if and for so long as the Contractor fails to perform any of its obligations hereunder or if the Contractor is in default under any terms and conditions of the Contract Documents. Such withholding shall be limited to an amount, sufficient in the reasonable opinion of the City, to cure any such default or failure.

XLVII. SCHEDULE OF VALUES

Before the first Application for Payment, the Contractor shall submit to the Architect and the City a schedule of values allocated to various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. Upon agreement, the City and Architect shall use such schedule as a basis for reviewing the Contractor's Applications for Payment.

XLVIII. APPLICATIONS FOR PAYMENT

- A. At least ten days before the date established for each progress payment, the Contractor shall submit to the Architect and the City an itemized Application for Payment for completed operations. Such application shall be notarized and supported by such data substantiating the Contractor's right to payment as the City or Architect may require (such as copies of requisitions from Subcontractors and material suppliers). Such application shall also state the amount of any required retainer related to the application. The Contractor shall certify such application for Payment as true and correct. In addition, such Application for Payment shall contain the Contractor's certification that the Contractor has paid all due and payable bills for the Work to date or that the Contractor shall pay the same from the proceeds of such application.
- B. Such applications may include requests for payment for changes properly authorized by Construction Change Directives but not yet included in Change Orders.
- C. Such applications shall not include requests for payment of amounts the Contractor does not intend to pay to a Subcontractor or material supplier because of a dispute or other reason.
- D. Unless otherwise provided in the Contract Documents, the City shall make payments on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the City, the City shall similarly make payment for materials and equipment suitably stored off the site at a location the parties have agreed upon in writing. The City conditions any such Payment for materials and equipment stored on or off the site upon the Contractor's compliance with measures and actions satisfactory to the City to establish the City's title to such materials and equipment or otherwise protect the City's interest. Such procedures, measures and actions shall include applicable Insurance, storage and transportation to the site for such materials and equipment stored off the site.
- E. The Contractor warrants that title to all Work covered by an Application for Payment shall pass to the City no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment, all Work for which Certificates for Payment have been previously issued and payments received from the City shall be free and clear of liens, Claims, security interests or encumbrances in favor of the Contractor,

Subcontractors, material suppliers, or other persons or entities making a Claim by reason of having provided labor, materials and equipment relating to the Work.

XLIX. CERTIFICATES FOR PAYMENT

- A. The Architect may issue a certificate for Payment to the City, with a copy to the Contractor, for such amount as the Architect determines is properly due. Otherwise, the Architect shall notify the Contractor and City in writing of the Architect's reasons for withholding certification in whole or in part as provided in Subparagraph L(A). The Architect shall take one or the other action within seven days after receipt of the Contractor's Application for Payment.
- B. The issuance of a Certificate for Payment shall constitute the Architect's representation to the City (based on the Architect's observations at the site and the data comprising the Application for Payment) that the Work has progressed to the point indicated and that the quality of the Work complies with the Contract Documents. The foregoing representations are subject to: the Architect's evaluation of the Work for conformance with the Contract Documents upon Substantial Completion; results of subsequent tests and inspections; minor deviations correctable prior to completion; and specific qualifications expressed in writing by the Architect. The Architect's issuance of a certificate for Payment shall further constitute the Architect's representation that the Contractor is entitled to payment in the amount certified. However, the issuance of a Certificate for Payment shall not be a representation that the Architect has:
 - 1. Made exhaustive or continuous on-site inspections to check the quality or quantity of the Work;
 - 2. Reviewed construction means, methods, techniques, sequences or procedures;
 - 3. Reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by the City to substantiate the Contractor's right to payment; or
 - 4. Made examination to ascertain how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

L. DECISIONS TO WITHHOLD CERTIFICATION

- A. The Architect may decide not to certify payment and may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the City. The Architect may do so when (in the Architect's opinion) the Architect can not make the representations to the City required by Subparagraph XLIX(B). If the Architect is unable to certify payment in the amount of the Application, the Architect shall notify the Contractor and City as provided in Subparagraph XLIX(A). If the Contractor and Architect cannot agree on a

revised amount, the Architect shall promptly issue a Certificate for Payment for any amount the Architect is able to certify. The Architect may nullify any Certificate for Payment previously issued in whole or in part based on subsequently discovered evidence or subsequent observations. The Architect may also nullify or deny certification in whole or in part as may be necessary in the Architect's opinion to protect the City from loss because of:

1. Defective Work not remedied;
2. Third party Claims filed or reasonable evidence indicating probable filing of such Claims;
3. Failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment;
4. Reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
5. Damage to the City or another party related to the Work;
6. Reasonable evidence that the Work shall not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages; for the anticipated delay; or
7. Persistent failure to carry out the Work in accordance with the Contract Documents.

- B. When the Contractor causes removal of the above reasons for withholding certification, the Architect shall make such certification for amounts previously withheld.
- C. Regardless of any dispute related to any Certificate of Payment, the Contractor shall expeditiously continue to prosecute the Work.

LI. PROGRESS PAYMENTS

- A. After the Architect has issued a Certificate for Payment, the City shall make payment in the manner and within the time provided in the Contract Documents. The City shall notify the Architect of such payment.
- B. The Contractor shall promptly upon receipt of payment from the City for certified work completed by Subcontractors pay the amount to which said Subcontractor is entitled for such certified portion of the Work, less any percentage portion of the Contractor's retainer applicable to the Subcontractor's work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in similar manner.
- C. The Architect shall, upon request, furnish to a

Subcontractor, if practicable, information regarding percentages of completion or amounts the Contractor has applied for and the City's and Architect's actions thereon related to such subcontractor's work.

- D. Neither the City nor Architect shall have an obligation to pay or to see to the payment of money to a Subcontractor.
- E. If practicable, the City may make Payment to material suppliers as provided for Progress Payments in Paragraphs LI(B-D).
- F. A Certificate for Payment, a progress payment, or the City's partial or complete use or occupancy of the Project shall not constitute acceptance of Work.

LII. FAILURE OF PAYMENT.

The City shall have seven days from the date the City receives a Certificate of Payment to pay the Contractor. If the City does not pay the Contractor the certified amount within such time, the Contractor may notify the City and Architect in writing that the Contractor will stop the Work until the City makes the required payment. Such notice shall provide at least fourteen additional days after receipt for the City to make payment prior to the Contractor stopping the Work. Upon such Work stoppage, the City and Contractor shall extend the Contract Time accordingly and increase the Contract Sum by the Contractor's reasonable costs of shut-down, delay and start-up. The parties shall complete such changes as provided in Changes In The Work, Paragraphs XLI-XLII.

LIII. SUBSTANTIAL COMPLETION

- A. When the Contractor considers that the Work (or a portion thereof that the City agrees to accept separately) is substantially complete, the Contractor shall prepare and submit to the Architect a comprehensive list of items to be completed or corrected. The Contractor shall proceed promptly to complete and correct items on the list. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. Upon receipt of the Contractor's list, the Architect shall make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Architect's inspection discloses any item that does not comply with the Contract Documents (including any items on the Contractor's list) the Contractor shall complete or correct such item upon the Architect's written notification. Once corrected or completed, the Contractor may submit a request to the Architect for another inspection to determine Substantial Completion.
- B. When the Work or designated portion thereof is substantially complete, the Architect may prepare a Certificate of Substantial Completion. Upon the City's approval, such Certificate shall establish: (1) the date of Substantial Completion; (2)

responsibilities of the Contractor for security, maintenance, heat, utilities, damage to the Work and Insurance; and (3) the time for the Contractor to finish all items on the list accompanying the Certificate. Warranties provided in the Contract Documents shall commence on the date of Substantial Completion unless otherwise provided in the Certificate of Substantial Completion. The Contractor shall accept the Certificate of Substantial Completion and the responsibilities assigned in such certificate by signing the same. The Architect shall submit the Certificate to the Contractor for such acceptance.

- C. The City shall make payment for the Work as certified in the Certificate of Substantial Completion upon the Contractor's written application and the Architect's Certificate for payment as provided in the Contract Documents.
- D. The Contractor shall secure and deliver to the City any written warranties and guarantees from Subcontractors, Sub-Subcontractors and suppliers. Such warranties and guarantees shall state the period of warranty as required by the Contract Documents or otherwise as the City has agreed. The Contractor warrants all of the Work regardless of separate warranties by Subcontractors at any tier.

LIV. PARTIAL OCCUPANCY OR USE

- A. The City may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor. Such partial occupancy or use may commence whether or not the portion is substantially complete. Prior to any partial occupancy or use, the City and Contractor shall by separate written agreement provide for the responsibilities assigned to each of them for at least the following: payments, retainer, security, maintenance, heat, utilities, damage to the Work and Insurance. Such written agreement shall also include terms concerning the period for correction of the Work and commencement of warranties. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the Architect as provided under Subparagraph LIII(A). The Contractor shall not unreasonably withhold consent to any such partial occupancy or use. The City and Contractor shall determine the stage of the progress of the Work by written agreement.
- B. Immediately prior to such partial occupancy or use, the

City, Contractor and Architect shall jointly inspect the subject area. The parties shall use such inspection to determine and record the condition of the Work.

- C. Unless the City and the Contractor agree otherwise in writing, the City's partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of such Work.

LV. FINAL COMPLETION AND FINAL PAYMENT

- A. Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect shall promptly make such inspection. If the Architect finds the Work acceptable under the Contract Documents and the Contract fully performed, the Architect shall promptly issue a final Certificate for Payment stating that the Work has been completed in accordance with terms and conditions of the Contract Documents. Such final Certificate shall mean the entire balance found to be due the Contractor and noted in said final Certificate is due and payable.
- B. The Architect's final Certificate for Payment shall constitute a further representation that the Contractor has fulfilled the conditions listed in Subparagraph LV(C).
- C. Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Architect: (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the City or the City's property might be responsible or encumbered (less amounts withheld by City) have been paid or otherwise satisfied, (2) a Certificate evidencing that Insurance required by the Contract Documents to remain in force after final payment is currently in effect and shall not be canceled or allowed to expire unless the insurer or Contractor provides at least 30 days' prior written notice to the City, (3) a written statement that the Contractor knows of no reason that the Insurance shall not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment and (5), if required by the City, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, Claims, security interests or encumbrances arising out of the Contract as may be designated by the City.
- D. After Substantial Completion, if final completion of the Work is materially delayed through no fault of the Contractor or by Change Orders affecting final completion, the Contractor may apply in writing for the City to make payment of the balance due for that portion of the Work fully completed and accepted as certified by the Architect. Such application, certification and payment shall not terminate the contract. If the remaining balance for Work not fully completed or corrected is less than any retainer

stipulated in the Contract Documents, the Contractor shall submit the written consent of surety to payment of the balance due for that portion of the Work fully completed and accepted to the Architect prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims. As to such portion, the making of final payment shall constitute a waiver of Claims by the City as provided in Subparagraph XXXVII(C).

- E. When the Contractor, any Subcontractor or any material supplier accepts final payment, such acceptance shall constitute a waiver of Claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment. Such payee shall make such waiver in addition to the waiver described in Subparagraph XXXVII(C).

SAFETY

LVII. SAFETY PRECAUTIONS AND PROGRAMS

- A. The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work.
- B. The Contractor shall immediately notify the City and Architect in writing whenever the Contractor encounters material on the site that the Contractor reasonably believes to be asbestos or polychlorinated biphenyl (PCB).

LVIII. SAFETY OF PERSONS AND PROPERTY

- A. The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury or loss to:
1. Employees on the Work and other persons who may be affected thereby;
 2. The Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody or control of the Contractor or the Contractor's Subcontractors or Sub-subcontractors; and
 3. Other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

- B. The Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss.
- C. The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent sites and utilities. The Contractor shall take all reasonable and proper precautions to protect persons, animals, and vehicles from injury. The Contractor shall leave fire hydrants and inlets free from encumbrance.
- D. The Contractor shall exercise utmost care when conducting potentially dangerous activities related to the work, including: the use or storage of explosives or other hazardous materials; or the use or storage of potentially dangerous equipment. The Contractor shall conduct such activities only under the supervision of properly qualified personnel.
- E. The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property Insurance required by the Contract Documents) to property referred to in Clauses LVII(A)(2) and LVII(A)(3) caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Clauses LVII(A)(2) and LVII(A)(3), except damage or loss attributable to acts or omissions of the City or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Paragraph XXXI, Indemnification.
- F. The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the City and Architect.
- G. The Contractor shall not load or permit any part of the construction or site to be loaded so as to endanger its safety.
- H. The Contractor shall provide sanitary Latrines for the Contractor's work force and other persons related to the Work on the Work site. The, type, number and location for such latrine facilities shall be subject to approval by the City.

LVIII. EMERGENCIES

In an emergency affecting safety of persons or property, the Contractor shall act to prevent threatened damage, injury or loss. Additional compensation or extension of time Claimed by the Contractor on account of an emergency shall be determined as provided in Paragraph XXXVII, Claims and Disputes and Paragraphs XLI--XLII, Changes In The Work.

FINANCIAL SECURITY**LIX. CONTRACTOR'S LIABILITY INSURANCE**

A. The Contractor shall purchase such Insurance as shall protect the Contractor and the City from Claims set forth below which may arise out of or result from the Contractor's operations under the Contract. Such operations shall include operations by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. Such claims shall include the following:

1. Claims under workers' compensation, disability benefit and other similar applicable employee benefit acts;
2. Claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees;
3. Claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees;
4. Claims for damages insured by usual personal injury liability coverage which are sustained (1) by a person as a result of an offense directly or indirectly related to employment of such person by the Contractor, or (2) by another person;
5. Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
6. Claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle; and
7. Claims involving contractual liability Insurance applicable to the Contractor's obligations under Paragraph XXXI, Indemnification.

- B. The Contractor shall procure the Insurance required by Subparagraph (A) of this paragraph in the minimum amounts (applicable law or a special condition of the Contract Documents may require greater coverage) as follows:

Worker's Comp

State	Statutory
Federal	Statutory

Auto Liability

Bodily Injury & Property Damage	\$1,000,000
	Combined Single Limit.

Commercial General Liability

Bodily Injury & Property Damage	\$1,000,000
	each occurrence
Aggregate	\$2,000,000
Personal Injury	\$1,000,000
	each occurrence
Contractual Liability	\$1,000,000
	each occurrence
Products and Completed Operations	\$1,000,000
	each occurrence

- C. All Liability Insurance Policies shall provide coverage: (1) on an "occurrence basis" only; (2) by endorsement to add the City of Lincoln, its officials, employees and volunteers as "Additional Insured;" and (3) without interruption from the Work Commencement Date until the date of final payment (as provided in the Contract Documents) or other coverage termination date for any coverage the Contractor is required to maintain after such final payment.
- D. The Contractor shall obtain all Insurance coverage with insurers authorized to do business in the State of Nebraska. The Contractor shall obtain all Insurance coverage with an insurer that has an A.M. Best's Rating of not less than A:VII, unless the City approves otherwise in writing.
- E. The Contractor shall not commence work under this Contract until the Contractor has obtained all Insurance required by the Contract Documents and the City Attorney has approved such Insurance for compliance with the Contract Documents. The Contractor shall not allow any Subcontractor to commence work on any subcontract until the Subcontractor has likewise obtained all similar Insurance required of the Subcontractor.

- F. The Contractor shall file all Certificates of Insurance with the Risk Management Office of the City of Lincoln on the standard ACORD CERTIFICATE OF INSURANCE form showing the specific limits of Insurance coverage required and any deductibles required. Such Certificate shall specifically state the Insurance policies are endorsed to require the insurer to provide the City of Lincoln 30 days' notice of cancellation, failure to renew or any material reduction of Insurance coverage. If any of the foregoing Insurance coverage is required to remain in force after final payment and is reasonably available, the Contractor shall submit an additional Certificate evidencing continuation of such coverage with the final Application for Payment as required by Subparagraph LV(C). The Contractor shall immediately notify the City of any material reduction or other changes related to any required coverage.

LX. PROPERTY INSURANCE

- A. Where buildings or structures are to be constructed under this Contract, the Contractor shall provide and maintain "all risk" property Insurance provided on a "completed value" basis, covering such building or structure to 100% of the insurable value thereof. Such Insurance shall contain a "waiver of occupancy" endorsement. The insurer shall pay losses, if any, to the City of Lincoln and Contractor as their interest may appear. The Contractor shall file a Certificate of Insurance evidencing such Insurance coverage with the Risk Management Office of the City of Lincoln as soon as any such building or structure becomes insurable until title for such building or structure passes to the City. Such Certificate shall show that the City Attorney has approved such Insurance as represented on the Certificate for compliance with the Contract Documents. See Also: Contractor's obligations and assumption of risk in Subparagraph XXV.
- B. Waivers of Subrogation. The City and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents and employees, each of the other, and (2) the Architect, Architect's consultants, separate contractors, if any, and any of their subcontractors, sub-subcontractors, agents and employees, for damages caused by fire or other perils to the extent covered by property Insurance obtained pursuant to this Paragraph LX or other property Insurance applicable to the Work, except such rights as they have to proceeds of such Insurance held by the City as fiduciary. The City or Contractor, as appropriate, shall require of the Architect, Architect's consultants, separate contractors, if any, and the subcontractor, sub-subcontractors, agents and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers

each in favor of other parties enumerated herein. The policies shall provide such waivers of Subrogation by endorsement or otherwise. A waiver of Subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the Insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

LXI. PERFORMANCE BOND AND PAYMENT BOND

- A. Within ten days after the acceptance of the bid, the Contractor shall furnish, on forms provided by the City, construction performance and construction payment Bonds, in a sum not less than the Contract Sum, executed by the Contractor and by a corporate surety company authorized to transact business in the State of Nebraska. Such Bonds shall be conditioned upon the faithful performance of all the terms and conditions of the Contract Documents, including the holding harmless of the City from failure to do so, and including the making good of any and all guarantees that the Contract Documents may require and the construction payment Bonds shall be further conditioned upon the payment of all laborers and material suppliers used in the performance of the Contract, including Insurance premiums and interest.

TESTING AND CORRECTING WORK

LXII. TESTS AND INSPECTIONS

- A. The Contractor shall conduct or arrange for any tests, inspections and approvals of portions of the Work required by the Contract Documents or by laws, ordinances, rules, regulations or orders of public authorities having jurisdiction at appropriate times. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the City, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. The City shall bear costs of tests, inspections or approvals that do not become requirements until after bids are received or negotiations concluded.
- B. If the Architect, City or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection or approval not included under Subparagraph LXII(A), the City shall instruct the Contractor to make arrangements for such additional testing, inspection or approval by an entity acceptable to the City. The City shall bear such costs except as provided in Subparagraph LXII(C).
- C. If such procedures for testing, inspection or approval under Subparagraphs LXII(A-B) reveal failure of the portions of the Work

to comply with requirements established by the Contract Documents, the Contractor shall bear all costs made necessary by such failure including those of repeated procedures and compensation for the Architect's services and expenses.

- D. The Contractor shall secure all required Certificates of testing, inspection or approval unless the Contract Documents require otherwise. The Contractor shall promptly deliver such Certificates to the Architect.
- E. The Contractor shall furnish, at no expense to the City, such samples of materials as may be required by the Architect or the City for testing. The Contractor shall bear any expense for retesting, required to establish the quality or acceptability of the materials in question.
- F. The Contractor shall not install material of any kind in the project until the Architect has inspected and approved such materials.
- G. The City reserves the right to retest all materials, prior to incorporation into the work, at the City's expense. The City may then reject all materials that, when retested, do not comply with the Contract Documents.
- H. The Contractor shall conduct or arrange for tests or inspections conducted pursuant to the Contract Documents promptly to avoid unreasonable delay in the Work.

LXIII. UNCOVERING OF WORK

- A. If a portion of the Work is covered contrary to the Architect's request or to requirements specifically expressed in the Contract Documents, the Contractor shall uncover the same for the Architect's observation upon the written request of the Architect. The Contractor shall replace or restore such uncovered Work at the Contractor's expense without any adjustment to the Contract Time.
- B. If a portion of the Work has been covered that the Architect has not specifically requested to observe prior to its being covered, the Architect may request to see such Work. Such request shall be in writing and approved by the City. Upon such request, the Contractor shall uncover the specified Work. If such Work is not in accordance with the Contract Documents, the Contractor shall pay such costs unless the condition was caused by the City. If such Work is in accordance with the Contract Documents, the City shall pay such costs.

LXIV. CORRECTION OF WORK

- A. The Contractor shall promptly correct Work rejected by the Architect or failing to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear costs of correcting such rejected Work, including additional testing and inspections and compensation for the Architect's services and expenses made necessary thereby.
- B. Unless specified otherwise in the terms of an applicable special warranty required by the Contract Documents, the Contractor shall warrant the work for a period of one year after: Substantial Completion of the Work or a designated portion thereof; or the date of commencement of warranties established under Subparagraph LIV(A). During such warranty period, if the City discovers that any of the Work is not in accordance with the Contract Documents, the City shall notify the Contractor in writing. The City shall give such notice promptly after discovery of the condition. Upon such notice, the Contractor shall promptly correct the work, at the Contractor's expense, unless the City has previously given the Contractor a written acceptance of such condition. The Contractor shall extend the warranty period for any portions of Work first performed after Substantial Completion. The Contractor shall extend the warranty period for the number of days between Substantial Completion and the actual completion of such Work. All obligations under this Subparagraph LXIV(B) shall survive acceptance of the Work under the Contract and termination of the Contract.
- C. The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are not corrected by the Contractor nor accepted by the City.
- D. If the Contractor fails to correct non-conforming Work within a reasonable time, the City may correct it in accordance with Paragraph IX. If the Contractor does not proceed with correction of such non-conforming Work within a reasonable time fixed by written notice from the Architect, the City may remove it and store the salvageable materials or equipment at the Contractor's expense. If the Contractor does not pay costs of such removal and storage within ten days after written notice the City may upon ten additional days' written notice sell such materials and equipment at auction or at private sale and shall account for the proceeds thereof, after deducting costs and damages owed by the Contractor, including compensation for the Architect's services and expenses made necessary thereby. If such proceeds of sale do not cover costs owed by the Contractor, the City shall automatically reduce the Contract Sum by the deficiency. If payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the City.

E. The Contractor shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of the City or separate contractors caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

F. Nothing contained in this Paragraph LXIV shall establish a period of limitation with respect to other obligations that the Contractor might have under the Contract Documents. The one year warranty period as described in Subparagraph LXIV(B) relates only to the specific obligation of the Contractor to correct the Work and has no relationship to the time within which the City may enforce the Contractor's obligation to comply with the Contract Documents, nor to the time within which the City may commence proceedings to establish the Contractor's liability other than specifically to correct the Work.

LXV. ACCEPTANCE OF NON-CONFORMING WORK

If the City elects in writing to accept Work that is not in accordance with the requirements of the Contract Documents, the City may do so instead of requiring its removal and correction. Upon such election, the City and Contractor shall reduce the Contract Sum as appropriate and equitable. The City and Contractor shall make such adjustment whether or not the City has made final payment under the Contract Documents. The Contractor shall pay the difference, if any, to the City within 10 days from such adjustment.

MISCELLANEOUS TERMS

LXVI. GOVERNING LAW

The Contract shall be governed by the laws of the State of Nebraska.

LXVII. SUCCESSORS AND ASSIGNS

The City and Contractor respectively bind themselves, their partners, successors, assigns and legal representatives to the other party hereto as to covenants, agreements and obligations contained in the Contract Documents. Neither party to the Contract shall assign or delegate the Contract as a whole without written consent of the other. If either party attempts to make such an assignment or delegation without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

LXVIII. WRITTEN NOTICE

The City, Contractor or Architect may deliver written notice in person to the individual; to a member of the firm or entity; or to an officer of the corporation for which it was intended. Written notice may be delivered by registered or certified mail to the last business address known to the party giving notice. Delivery by either method is hereby acknowledged as sufficient and adequate service of any written notice related to the Contract.

LXIX. RIGHTS AND REMEDIES

A. Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to duties, obligations, rights and remedies otherwise imposed or available by law.

B. No action or failure to act by the City, Architect or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

LXX. COMMENCEMENT OF STATUTORY LIMITATION PERIOD

A. Before Substantial Completion. As to acts or failures to act occurring prior to the relevant date of Substantial Completion, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than such date of Substantial Completion;

B. Between Substantial Completion and Final Certificate for Payment. As to acts or failures to act occurring subsequent to the relevant date of Substantial Completion and prior to issuance of the final Certificate for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of issuance of the final Certificate for Payment; and

C. After Final Certificate for Payment. As to acts or failures to act occurring after the relevant date of issuance of the final certificate for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of any act or failure to act by the Contractor pursuant to any warranty provided under Paragraph XVII, the date of any correction of the Work or failure to correct the Work by the Contractor under Paragraph LXIV, or the date of actual commission of any other act or failure to perform any duty or obligation by the Contractor or City, whichever occurs last.

D. Notwithstanding any provision herein to the contrary, no applicable statute of limitations shall commence for any portion of the Work that is not in accordance with the requirements of the Contract Documents, that would not be visible or apparent upon conducting a reasonable investigation, and that is not discovered by the City until after the date that would otherwise be the date of commencement of the applicable statute of limitations. In such case, the applicable statute of limitations shall commence on the date of such discovery by the City.

LXXI. INDEPENDENT CONTRACTOR

The City is interested only in the results obtained and Contractor shall perform as an independent contractor with the sole control of the manner and means of performing the Work required under the Contract. Contractor shall complete the Contract according to its own means and methods of work, which shall be in the exclusive charge and control of Contractor, and which shall not be subject to control or supervision by the City except as to the results of the Work. Contractor is, for all purposes arising out of the Contract, an independent contractor, and the Contractor or any Subcontractor, agent, employee or representative and employees or agents of any of them shall not be deemed an employee of the City. It is expressly understood and agreed that Contractor shall in no manner be entitled to any benefits to which the City's employees are entitled including, but not limited to, overtime, any retirement benefits, workers' compensation benefits and injury leave, or other benefits.

TERMINATION OR SUSPENSION

LXXII. TERMINATION BY THE CONTRACTOR

A. The Contractor may terminate the Contract if the Work is stopped for a period of 30 days through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons performing portions of the Work under contract with the Contractor, for any of the following reasons:

1. Issuance of an order of a court or other public authority having jurisdiction;
2. An act of government, such as a declaration of national emergency, making material unavailable;
3. The failure of the Architect to issue a certificate for Payment when the Architect has not notified the Contractor of the reason for withholding certification as provided in Subparagraph XLIX(A), or the failure of

the City to make payment on a Certificate for Payment within the time stated in the Contract Documents; or

4. The City's repeated suspensions, delays or interruptions as described in Paragraph LXXIV constitute in the aggregate more than 100 percent of the total number of days scheduled for completion or 120 days in any 365-day period, whichever is less.

B. If one of the above reasons exist; the Contractor may upon seven additional days' written notice to the City and Architect, terminate the Contract and recover from the City payment for Work executed and for proven loss with respect to materials, equipment, tools, and construction equipment and machinery, including reasonable overhead, profit and damages.

C. If the City has persistently failed to fulfill obligations important to the progress of the Work under the Contract Documents, causing the Contractor to stop the Work for a period of 60 days through no act or fault of the Contractor (or a Subcontractor or their agents or any other persons performing portions of the Work under the contract with the Contractor) the Contractor may, upon seven additional days' written notice to the City and the Architect, terminate the Contract and recover from the City as provided in Subparagraph LXXII(B)

LXXIII. TERMINATION BY THE CITY FOR CAUSE

A. The City may terminate the Contract if the Contractor:

1. Refuses or fails to supply enough properly skilled workers or proper materials;
2. Fails to make payment to Subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the Subcontractors;
3. Disregards laws, ordinances, or rules, regulations or orders of a public authority having jurisdiction; or
4. Otherwise commits a substantial breach of any provision of the Contract Documents.

B. When any of the above reasons exist, the City may without prejudice to any other rights or remedies of the City may (after giving the Contractor and the Contractor's surety, if any, seven days' written notice) terminate employment of the Contractor. In addition the City may (subject to any prior rights of the surety):

1. Take possession of the site and of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
2. Accept assignment of subcontracts pursuant to Paragraph XL; and
3. Finish the Work by whatever reasonable method the City may deem expedient.

- C. When the City terminates the Contract for one of the reasons stated in Subparagraph LXXIII(A), the Contractor shall not receive further payment until the Work is finished.
- D. If the unpaid balance of the Contract Sum exceeds the costs of finishing the Work, (including compensation for the Architect's services and expenses made necessary thereby) such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the City. The Architect shall certify any amount to be paid to the Contractor or City upon application, and this obligation for payment shall survive termination of the Contract.

LXXIV. SUSPENSION BY THE CITY FOR CONVENIENCE

- A. The City may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work in whole or in part for such period of time as the City may determine.
- B. The City and Contractor shall make an adjustment for increases in the cost of the Contract caused by suspension, delay or interruption. Such adjustment shall include a reasonable profit on the increased cost. No adjustment shall be made to the extent that:
1. Performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible; or
 2. An equitable adjustment is made or denied under another provision of this Contract.
- C. Adjustments made in the cost of performance may have a mutually agreed fixed or percentage fee.

LXXV. TERMINATION BY THE CITY FOR CONVENIENCE

- A. The City may at its option, terminate this Contract in whole or in part at any time without cause by written notice thereof to the Contractor.
- B. Upon any such termination, the Contractor agrees to waive any claims for damages, including loss of anticipated profits, on account thereof, and as the sole right and remedy of the Contractor, the City shall pay Contractor in accordance with this Paragraph. The provisions of the Contract which by their nature survive final acceptance of the Work, shall remain in full force and effect after such termination to the extent provided in such provisions.

- C. Upon receipt of any such notice of termination, the Contractor shall, unless the Notice directs otherwise, immediately:
1. Discontinue the Work to the extent specified by the City
 2. Place no further orders or subcontracts for materials, equipment, services or facilities, except as may be necessary for completion of that portion of the Work, if any, the City has directed not to be discontinued;
 3. Promptly make every reasonable effort to procure cancellation upon satisfactory terms as determined by the City of all orders and subcontracts not related to that portion of the Work, if any, the City has directed not to be discontinued;
 4. Do only such other activity as may be necessary to preserve and protect work already in progress and to protect materials and plants and equipment on the Project Site or in transit thereto.
- D. Upon such termination, the obligations of the Contract shall continue as to portions of the Work already performed and as to bona fide obligations the Contractor assumed prior to the date of termination.
- E. Upon termination, the City shall pay the Contractor the full cost of all Work properly done by the Contractor to the date of termination not previously paid for by the City. If at the date of such termination the Contractor has properly prepared or fabricated off site any goods for subsequent incorporation in the Work, the City may direct the Contractor to deliver such goods to the Site or to such other place as the City may reasonably determine, whereupon the City shall pay to the Contractor the cost for such goods and materials.